WEST VIRGINIA SENIOR AND DISABLED ASSESSMENT PILOT PROJECT

PROJECT SUMMARY
SEPTEMBER 2000 - SEPTEMBER 2001

A COLLABORATIVE
PUBLIC-PRIVATE PARTNERSHIP

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EXECUTIVE SUMMARY

The West Virginia Health Care Authority (WVHCA) has recently completed a pilot project in several West Virginia counties to evaluate the appropriateness of a unique, computerized assessment tool for West Virginia's senior and disabled populations. The pilot project stemmed from West Virginia's need to embrace a uniform assessment tool for entry into the long-term care system as identified by the Interagency Long-Term Care Panel.

The computerized assessment tool, the Senior and Disabled Persons Assessment Coupler (SADPAC), was developed by the PKC Corporation (Problem Knowledge Coupler), Burlington, Vermont. The instrument is a Windows™ based data capture and clinical guidance software system that provides decision and management support to health care providers. A parallel benefit is that it couples unique patient information with evidence-based medical and social sciences knowledge to guide clinical decision-making, care planning and care management.

The fact that West Virginia is faced with a population explosion of persons with multiple chronic conditions, is supporting a long-term care industry and home health care network under increased stress, and is confronting reduced reimbursement for higher intensity services were the compelling reasons to take action.

To prepare for long-term care system change, coordination was required among the state agencies and private sector responsible for the delivery, regulation, and payment of long-term care services. The WVHCA collaborated with administrators from the Bureau of Senior Services (BOSS), the Bureau for Medical Services (BMS), the Office of Health Facility Licensure and Certification (OHFLAC), and the West Virginia Medical Institute (WVMI) throughout the planning and implementation phases of the project.

The pilot included users from three home care service types – home health agencies, case management agencies, and county senior programs. The goal of this project was to expand the application of the Senior and Disabled Persons Assessment Coupler and other couplers across the spectrum of services to build the necessary bridges between the acute and long-term care systems.

The results and recommendations from the project will provide West Virginia's long-term care system policy makers with the information needed to assist with establishing a long-term care system that will provide for efficient communication of confidential information across providers and enhanced clinical decision-making, to improve the quality of care delivered to each individual.

Project Summary

I. Project Background

In 1996, the West Virginia Interagency Long Term Care Panel (ILTC) was formed to review issues related to long-term care for West Virginia's (WV) elderly and disabled population. The Panel drafted a long-term care concept paper and submitted it to the 1997 WV Legislature. The Panel formed task forces to address specific issues.

Dr. Barbara Holt, Assistant Director, WV Center on Aging, was appointed to chair the Universal Assessment Task Force (UATF). The UATF reviewed the assessment tools used by 10 other states and subsequently developed its own paper-based assessment tool. Dr. Holt proposed to the Panel and the WVHCA that the tool be migrated to an electronic format to facilitate its use and data analysis.

In April 1999, several WVHCA staff members attended an Agency for Healthcare Research and Quality (AHRQ) conference and were exposed to the PKC Senior and Disabled Persons Assessment Coupler. The Senior and Disabled Persons Assessment Coupler showed promise, because in addition to capturing data electronically, it provides a comprehensive assessment of a senior or disabled person's health status and risk profiles at the point-of-care, while facilitating capture of data for Medicare reimbursement.

PKC was invited to conduct demonstrations of the Senior and Disabled Persons Assessment Coupler, and after several functional and technical evaluations, the ILTC Panel reported to the Governor that PKC's technology met and exceeded the needs and objectives outlined by his office. The Panel subsequently authorized the WVHCA to underwrite a pilot project in September 2000 to further evaluate the Senior and Disabled Persons Assessment Coupler using West Virginia seniors and disabled citizens. The project entailed implementing the Senior and Disabled Persons Assessment Coupler at twelve test sites within West Virginia. The test sites included four WV Home Health Agencies, four Case Management Agencies and four County Senior Programs. The staff from these agencies used the computerized assessment instrument via laptop computer on regularly scheduled visits conducted by registered nurses and social workers.

II. Implementation Process

One of PKC's primary goals for project implementation was to deliver stable, solid software to the pilot site agencies while remaining open to their feedback, and flexible enough to be responsive to their input and needs.

Prior to the September training, the WVHCA ordered laptops for all participating agencies that needed them. Those agencies wishing to use their own laptops for

the pilot project shipped them to the WVHCA for installation of the pilot-specific software. PKC personnel were present the day before training to assist WVHCA personnel in loading the software and to ensure the laptops were configured in the correct manner. The WVHCA also installed additional "support-type" software to facilitate communication among PKC, the agencies, and WVHCA. This software included PC Anywhere and a free web and e-mail application. Each agency had at least two laptops loaded with PKC software and the additional support software.

Training was delivered September 6–9, 2000, with agency personnel using the actual laptops with the newly installed software they would later use in the field. Consequently, they were able to learn both the software and the hardware skills necessary to implement the pilot project with their particular client cohort.

Throughout the implementation process, PKC supplied comprehensive client support services for all the agencies. This has been an important part of the implementation process as using any new tool inevitably leads to unforeseen questions and issues. In addition to the monthly teleconferences among the individual agencies, PKC, and the WVHCA, PKC client support representatives initiated follow-up phone contact with the pilot site agency personnel on a regular basis. PKC has been able to resolve all software issues, many work-flow and business practice questions, as well as many hardware questions. Additionally, the West Virginia Extranet website was designed as part of the implementation process to facilitate communication between the agencies themselves about common problems, questions, and issues.

III. Current Status

Ten of the 12 originally selected pilot sites participating in the WV Senior and Disabled Assessment Pilot Program have excelled at contributing to the goal of designing a common and standardized set of assessment instruments and processes for entry into WV's long-term care system. The ten pilot sites include: two home health agencies, four county senior programs, and four case management organizations. Two home health agencies have withdrawn from the pilot project. Both agencies cited insufficient personnel as a contributing factor for their decision to withdraw.

In an extensive and collaborative effort with PKC and the WVHCA, all participating agencies have successfully implemented processes and guidelines for users of the PKC software to meet state health care criteria in obtaining necessary client information. While minor agency-specific administrative process and functionality issues remain, all users have contributed significantly to improving the Coupler software to meet the needs of state-specific health care documentation criteria. Monthly meetings with representative users from each agency contributed to this improvement process and remain a vital aspect of future software and process improvements.

Additional indicators pointing to the success of the implementation of PKC software are based on the number of individual client assessment and clinical Coupler sessions completed. See Appendix A for a complete summary of statistical data from the agencies. A total of 1251 sessions were completed by the agencies participating in the pilot project. ServCare Home Health withdrew from the project and Central West Virginia Aging Case Management completed less than the twenty-five sessions that were required by each agency.

IV. User Satisfaction Surveys

PKC distributed project surveys to all participating agencies in July 2001 (Appendix B). A total of eighteen surveys were returned, seven from County Senior Programs, seven from Case Management Agencies and three from Home Health Agencies. User testimonials may be found in Appendix B and results are detailed in Appendix C.

Sixty-seven percent of the surveys indicated that the average time to complete the Senior and Disabled Persons Assessment Coupler was between one to two hours. More than 50 Coupler sessions were completed by 50% of the respondents.

Eighty-three percent of the respondents support the WV Senior and Disabled Assessment Coupler Project for statewide implementation, as well as within their agencies.

PKC developed an automated version of the WV PAS 2000. This form was meant to replace the PAS 2000 submitted by the Case Management Agencies to WVMI. The responses indicate that the PAS 2000 is not being submitted to WVMI, however the seven surveys from the Community Senior Programs also indicated that submission of PAS 2000 is not appropriate for the Community Care Program. The County Senior Programs did indicate that in spite of the length of the report, that more than 50% of the time they replaced the paper PAS 2000, with the automated PAS version. One of the seven Case Management Agencies indicated it had submitted the PAS 2000 to WVMI.

The forms that agencies were able to replace varied among the agencies. One of the three Home Health Agencies was able to replace the OASIS Assessment. Case Management Agencies reported the forms that were replaced included the OASIS Assessment, Nurses Notes, PAS 2000, Personal Care Nursing Assessment, Nutritional Assessment, RN-01, Social Assessment, CM-2A, the medication sheet and the ADL Scale.

V. Patient Satisfaction Surveys

The Senior and Disabled Assessment Computer Program questionnaire collected information on customer satisfaction and perceptions of the pilot project. Questionnaires were mailed on August 14, 2001 with a requested return date of

August 30, 2001. A total of 613 questionnaires were mailed. Questionnaires were mailed to 603 patients who participated in the pilot project. The remaining questionnaires were sent to the ten participating agencies in the pilot project. Of the 603 questionnaires mailed to patients, 182 were completed and returned and 34 were returned undeliverable. The response rate for the questionnaire is 30 percent. The Patient Satisfaction Survey is detailed in Appendix D. A summary of the results is listed below.

- The majority of patients who responded like using the computer program designed for seniors and individuals who are disabled when their Nurse or Social Worker visits them at home.

- The majority of patients reported that their Nurse or Social Worker seemed to like using the computer program to assess their medical needs.

- Most patients would be willing to use the program designed for seniors and individuals who are disabled again.

- A slight majority of patients who responded reported that use of this program allowed them to participate more in their health care.

- Most patients reported that use of this computer program allowed their nurse or social worker to gather more information about them.

- Many patients reported that use of the computer program helped them to better understand their health.

- The majority of patients who responded reported that use of the computer program helped make better use of their time during the visit with their Nurse or Social Worker.

- Most patients agreed that the amount of time required by their Nurse or Social Worker to complete the assessment in their homes was acceptable.

- Many respondents also provided valuable individual comments when completing the questionnaires.

- Patients most often completed this questionnaire independently. Family members were the second most common respondents.

VI. Refinements

1. Comprehensive Integrated Assessment. During training in September 2000, the home health agencies identified the need to integrate their own comprehensive assessment with the new OASIS assessment mandated by HCFA. While the Senior and Disabled Persons Assessment Coupler already functions as a comprehensive assessment as well as an OASIS assessment, the Home Health

Agencies stated that they require a Body Systems Review component that was not a part of the Senior and Disabled Persons Assessment Coupler. The WVHCA spearheaded a dialogue between the Home Health Agencies, PKC, and OHFLAC resulting in PKC's development of a Body System Review component in a new version of the Senior Assessment to fulfill the need for a Comprehensive Integrated Assessment (CIA). This new version was delivered by PKC during a two-week site tour in October 2000. The software was installed on site and training was provided.

As further follow-up on this initiative, the WVHCA organized a Joint Application Development (JAD) meeting in December 2000 to apply further specificity to the initial CIA. WVHCA, PKC, and all of the pilot site agencies attended, along with representatives from the BOSS, WVMI, and the BMS.

PKC developed an extensive sequence for the Comprehensive Integrated Assessment and it deployed as an enhancement to the Senior and Disabled Persons Assessment Coupler for the April 2001 release.

2. ADL Rating Scale and PAS 2000 Report. The ADL Rating Scale and PAS 2000 Report are discussed elsewhere in this report.

3. OASIS Export. PKC partnered with NYBOR, Inc. to develop a database to be used by the Home Health Agencies to export required OASIS data to either Haven or a third party vendor. The database was developed to:

- Collect demographics on an individual patient to include the name and patient identification number,
- Pass demographic information to the Coupler,
- Save the session data within the database,
- Provide an export function to allow the selection of multiple patients and sessions,
- Provide the interface to retrieve a prior session from the database in order to load within a current Coupler session, and
- Provide export data which meets the OASIS Data submission specifications

The demonstration of the application was presented to the WVHCA and representatives from the Office of Health Facility Licensure and Certification on October 1, 2001.

VII. Data Evaluation

Graphs in Appendix E examine the aggregate data in detail.

1. Descriptive Statistics

Within West Virginia, many opportunities abound to improve the health status of the State's residents. According to the 2000-2002 State Health Plan, West Virginia leads the nation in the incidence and prevalence of heart disease, cancer, and many other chronic diseases. Although individuals are ultimately responsible for health behaviors, our choices are influenced by social, economic, and cultural factors.

This descriptive analysis covers five areas: general patient characteristics, risk factors, chronic disease, other characteristics, and medications. The information included in this description, based on raw data, is presented on a statewide aggregate basis to provide a baseline profile of the PKC pilot project patients. Six hundred forty-five assessments were completed on 615 patients to understand more about their health status. A total of 52 different health variables are included in this analysis of assessments, with between two and 497 responses for each category. The range of participants included in each level of analysis is from 450 and 645. Four hundred fifty participants are over the age of 65.

To the extent possible, each identified risk factor includes comparable information on West Virginia's total population and West Virginia's rank among all other states. For example, ranking 1st in obesity would mean having the highest incidence of obesity among all the states; conversely, ranking 50th would mean having the lowest incidence. Sources for this data are the 2001 Health Care State Rankings and the report on the 1999 Behavioral Risk Factor Survey: Lifestyle Behaviors Affecting West Virginians.

Future evaluation activities could include additional information, including analyzing this information for each agency, each peer group, as well as the entire state and comparisons between population groups such as Medicare, Medicaid, senior centers, case management agencies and home health agencies.

2. General Patient Characteristics

More than 70% of the pilot project participants are female. Most patients are either widowed or single. More than 51% have not completed an advance directive and over 20% have not identified an agent for making their health care decisions.

3. Risk Factors

Two of the pilot project goals have been to identify individuals who are at-risk of institutionalization and/or adverse outcomes and to provide a complete list of patient problems and provide organizational/provider strategies for health

promotion activities. Patients may then benefit from additional counseling to improve their health status or lessen the severity of the behavior, illness, and disease.

This report presents data obtained from September 2000 to September 2001 and identifies the following health behaviors, also called risk factors, that can place individuals at risk of preventable illness and death. The factors include: repeat hospital admissions, nutrition (overweight and obesity), geriatric depression, hypertension, smoking, alcohol and other risk factors (exercise, osteoporosis, and falls).

The **Pra Score** (Probability of Repeat Hospital Admissions) identifies older people who tend to be chronically ill, functionally impaired, and highly medicated who may benefit from interventions designed to avert health crises and the need for expensive care. Patients are classified as either high or low risk. A score greater than .2680 indicates the probability of a repeat hospital admission. Over 66% of the assessed patients are at risk of a repeat hospital admission, almost 25% of the assessed patients are at low risk, and 9% were unknown. In comparison, according to an article published in the Journal of the American Geriatrics Society, 1997, Vol. 45, No. 5. pp. 615-617, 25.2% of the Medicare Risk health plan enrollees were identified as high risk and 74.8% were low risk.

a. Nutrition (Obesity and Overweight)

Obesity is a major risk for cardiovascular disease, arthritis, gall bladder disease, and some types of cancer. It is the most important preventable cause of diabetes and is associated with hypertension. The measure used to express weight-for-height and the value used to identify overweight and obesity is the Body Mass Index (BMI). Obesity is defined as having a BMI of 30.0 or more and overweight is defined as a BMI between 25.0 and 29.9. The best BMI for persons aged 60-69 is 26.6, although there are not absolute “normal” values for weight or BMI with advancing age.

Of the assessed patients, 51.4% have a BMI with a score greater than 26.6. Forty percent of the assessed patients have a high Nutritional Risk Score, which is indicated by a score of 6 or greater. Over 20% of the patients are at risk for obesity and 10% had an unintentional weight gain of 10 or more pounds in the last six months.

Obesity remains a persistent problem in West Virginia. In 1999, an estimated 20.5% of individuals over the age of 65 were obese and almost 41% were overweight. Ranking 2nd in the nation, 62% of all West Virginia adults were overweight or obese, compared to 56.2% nationally.

b. Depression

Depression occurs frequently among older individuals. Over 40% of the assessed patients had a score greater than five, which indicates depression. Data derived from the nationally validated Geriatric Depression Scale Short Form indicate scores greater than 5 indicate depression. One hundred eighty-five or 41% of the patients indicate depression, with 39 or 8.7% having a score greater than 10.

c. Hypertension

Hypertension increases the risk of stroke and coronary heart disease. According to project data used to develop the charts in Appendix E, of the 645 completed assessments, 76 were hospitalized for cardiac problems (CHF, chest pain). Blood pressure tends to increase with age and is affected by weight, physical activity, and, to a lesser extent, diet. Fifty percent of those aged 65 and older in West Virginia are hypertensive, resulting in ranking 3rd in the nation.

d. Smoking

The U. S. Surgeon General has concluded that smoking is the single most preventable cause of death and premature disability in our society. It is a major risk factor for the development of health disease and cancers of the lung, larynx, pharynx, oral cavity, pancreas, kidney, and urinary bladder. One in five of the assessed patients smoke cigarettes or use tobacco regularly and 5% are heavy smokers. According to the West Virginia Behavior Risk Factor Surveillance Survey, in 1999, an estimated 8.8% of West Virginians over age 65 smoke cigarettes.

e. Alcohol Misuse

PKC pilot patients are at low-risk of alcohol misuse. The alcohol dependency risk factor is 1.2%. According to the Behavior Risk Factor Surveillance Survey in 1999, an estimated 1.5% over age 65 consumes 60 or more alcoholic beverages during a month.

f. Other risk factors

Four hundred ninety-two of the assessed patients, or 76%, indicate no regular exercise program or a sedentary lifestyle, 26% are at-risk of osteoporosis, and over 53% experience poor balance or unsteadiness. Almost 38% of the women do not examine their breasts carefully every month. Over 27% have not had a Pap smear in the last three years, and almost 13% have not regularly received a mammogram and clinical breast exam. Over 30 percent have not received a pneumonia vaccination in the

last 5 years. Nearly 30% have not received an influenza vaccination in the last year, and nearly 25% have not received a Tetanus vaccination in the last 10 years.

4. Chronic Disease

According to project data, coronary artery disease occurs in over 40% of patients, myocardial infarction has occurred in 20% of patients, and angina pectoris occurs in over 31% of patients.

Diabetes occurs in over 31% of the patients.

Dyspnea occurs with moderate exertion, such as dressing, and occurs in over 25% of patients. Respiratory treatment occurs either intermittently or continuously for over 12% percent of patients.

Fourteen percent of patients have cancer.

5. Medications

Of all the assessed patients, nearly 60% of all patients take blood pressure medication or diuretics, 40% take cardiac drugs, over 32% take anticoagulants or blood thinners, over 25% take diabetic medications, 22% take asthma medications, 20% take cholesterol medications, and 2.5% take cancer/antineoplastic drugs.

National estimates for the new cases of cancer in 2001 indicate West Virginia leads the nation in total new cases per 100,000 population for new leukemia cases, new lung cancer cases and ranks 2nd in non-Hodgkin's Lymphoma cases. West Virginia also ranks 3rd in new cases of female breast cancer and ranks 4th in new cases of colon/rectum cancer.

6. Conclusion

This data can be turned into valuable information to improve clinical and administrative decision-making for identifying at-risk behaviors and health care conditions, promoting preventive health practices, providing appropriate management and interventions, including health education and self-care strategies, and identifying areas for enhanced staff education.

VIII. Participating Agencies

County Senior Programs

Name:	**Kanawha Valley Senior Services, Inc.**
Address:	2428 Kanawha Boulevard, E Charleston, WV 25311
Telephone No.:	304-348-0707
Fax No.:	304-348-6432
Contact:	Scott McClanahan, Community Health Care Director Martha Canterbury, RN, Director of Nursing Earl Jarvis, Executive Director

Name:	**Pride in Logan County**
Address:	PO Box 1346 Logan, WV 25601
Telephone No.:	304-752-6868
Fax No.:	304-752-1047
Contact:	Karen Burgess, Administrative Assistant Linda Curry, Executive Director Brenda York, Medicaid Clerk Patricia Burgess, RN Cheryl Dameron, RN

Name:	**Wood County Senior Citizen's Association**
Address:	925 Market Street Parkersburg, WV 26101
Telephone No.:	304-485-6748
Fax No.:	304-422-1897
Contact:	Bertie Adkins, Technical Support Karen Hackett, Executive Director Sherry Amos, RN Karen Lucas, RN

Name:	**Putnam County Aging**
Address:	694 Winfield Road St. Albans, WV 25177
Telephone No.:	304-755-2385
Fax No.:	304-755-2389
Contact:	Rebecca Mick, Executive Director Patricia Gilliam, RN, Home Care Director

Home Health Agencies

Name:	**Grafton-Taylor County Health Dept. Home Health**
Address:	Grafton, WV 25354
Telephone No.:	304-265-1288
Fax No.:	304-265-5067
Contact:	Betty Weekly, RN

Note: Grafton-Taylor County Health Department Home Health withdrew from the Project in October 2000 due to its inability to resolve differences regarding the Comprehensive Integrated Assessment (CIA) required for OASIS reporting to HCFA. In spite of the fact PKC made initial changes to the Coupler to incorporate the CIA, Grafton-Taylor felt that with its current staffing, it could not meet the commitment to use the Coupler and additional forms required by its agency.

Name:	**Thomas Home Health**
Address:	4605 MacCorkle Ave., SW South Charleston, WV 25309
Telephone No.:	304-766-3447
Fax No.:	304-766-3457
Contact:	Becky Massey, RN; Director of Nursing Karen Brauner, RN Beverly Stevens, LPN

Name:	**Care Partners, Inc.**
Address:	Morgantown, WV 26505
Telephone No.:	304-285-5500
Fax No.:	304-285-2787
Contact:	Tammy Minton, RN; Executive Director Margaret Cesario, RN; Clinical Director

Name:	**ServCare (St. Joseph's Hospital, Parkersburg)**
Address:	Parkersburg, WV 26101
Telephone No.:	304-428-2554
Fax No.:	304-428-2518
Contact:	Elizabeth Leasure, RN

Due to new ownership of the agency, ServCare withdrew from the project in July 2001.

Case Management Agencies

Name:	**Central WV Aging Services, Inc.**
Address:	5 South Florida St. PO Box 186 Buckhannon, WV 26201
Telephone No.:	304-472-0395
Fax No.:	304-472-4673
Contact:	Evelyn Post, Executive Director Jonnie George RN, LSW

Name:	**Health Consultants Plus**
Address:	PO Box 1088 Clarksburg, WV 26302
Telephone No.:	304-782-3765
Fax No.:	304-782-1857
Contact:	Debbie Ornstein, Executive Director Lisa Hoover, Case Manager Susan Palek, RN

Name:	**Potomac Highlands Support Services**
Address:	PO Box 869 Petersburg, WV 26847
Telephone No.:	304-257-1221
Fax No:	304-257-4958
Contact:	Karen Howell, Executive Director Martha Landis, CFO/Network Administrator Doris Ringler, RN

Name:	**Coordinating Council for Independent Living**
Address:	1145 Dunbar Ave. Dunbar, WV 25604
Telephone No.:	304-766-2245
Fax No.:	304-257-1221
Contact:	Dennis Parrucci, Executive Director David Wilson, Case Management Supervisor Melanie Shilot, RN

IX. User Group Meetings

The PKC Corporation and the WV Project Manager held monthly teleconference meetings with each of the agencies participating in the project, except for the months of December 2000 and June 2001 when face-to-face meetings were held.

The meetings focused on the use of the Senior and Disabled Persons Assessment Coupler as well as issues or concerns the agencies had during the implementation phase of the project. During these meetings, issues that could be resolved were

addressed, and if needed, follow-up arrangements were made. When necessary, issues were elevated by the WVHCA either internally or externally to the appropriate State agency for input or possible resolution. Also, when necessary the Project Managers used this opportunity to share new information with the participants and to remind the agencies of their obligation to submit their monthly reports and data. Most of the agencies were consistently noncompliant in submitting their data and reports as scheduled in their agreements with the WVHCA.

Initially these meetings were 30 to 45 minutes in duration but gradually decreased to approximately 15 minutes each month. Most of the agencies were compliant with these prescheduled teleconferences.

Concerns have also been raised in reference to the duplication of forms that need to be completed such as the RN and Social Assessment in addition to the Senior and Disabled Persons Assessment Coupler. It has been determined by the BOSS that data collected by the PKC Senior and Disabled Persons Assessment Coupler will replace the current RN and Social Assessment. Appropriate billing codes were provided to the agencies. In addition, the RN monitors have been advised that the agencies participating in the pilot project should not be cited for being out of compliance with existing Medicaid Waiver or Community Care policies and procedures for the purpose of the pilot.

Issues, Concerns, Recommendations, and Resolutions Identified by Home Health Agencies

- Soon after the project began the Home Health agencies began to communicate high stress levels due to the project being implemented at the same time that HCFA required all Medicare Certified Home Health agencies to implement the Prospective Payment System. One Home Health Agency (Grafton Taylor Health Department Home Health) withdrew from the project in October 2000 stating it would be too labor intensive to do both.
- Home Health agencies suggested to the Project Managers that it would be very beneficial to their nursing staff to have the Physician Desk Reference software on their laptops to assist with medication management efforts. Agencies were given permission to install the PDR software.
- The Home Health agencies determined very early in the project that the body system review within the Senior and Disabled Persons Assessment Coupler would not satisfy HCFA regulations. HCFA regulations cited that the body system review was to be comprehensive and integrated or "sprinkled appropriately" throughout each agency's individual assessment. This discovery led to rapid planning for a two-day Joint Application Design session, held in December 2000, involving representatives fom all of the agencies participating in the project, including Case Management and County Senior Programs. A "Head to Toe" comprehensive integrated assessment was developed and later incorporated into the software.

- In June 2001, ServCare Home Health, Parkersburg, WV withdrew from the project due to a change in ownership of its agency and a severe Registered Nurse shortage within its agency.

Issues, Concerns, Recommendations, and Resolutions Identified by County Senior Programs

- The 60 to 90 minutes required to complete the Senior and Disabled Persons Assessment Coupler was too time consuming.
- Patients/clients were not comfortable with answering the financial questions contained within the Senior and Disabled Persons Assessment Coupler. The questions were modified to include ranges: for example, $100-$500, $500-1000, or $1000-1500, etc.
- Sequence and length of PAS 2000 Report (up to 25 pages) and inability to populate annotations in the PAS Report. Modifications to the software were made when feasible.
- Intermittently ADL and IADL scoring methodology would fall outside of the scale. The PKC Corporation staff and the WV Project Manager worked with the BOSS to resolve this issue.
- The lack of a "user-friendly" Encounter Report was a problem. The report was redesigned and all of the participants reported that it was greatly improved. Vast improvement occurred in the reassessment completion time.
- The majority of the County Senior Programs stated by November 2000 that the software was a definite time saver specifically when used for reassessments due to the pre-populated fields. By February 2001, the staff from the County Senior Programs were stating, "It would be hard to go back to the old process" or the paper-based system of data collection.

  Throughout the yearlong project, the County Senior Program staff made multiple recommendations for improvement to the Coupler, which were implemented when feasible.

Issues, Concerns, Recommendations, and Recommendations Identified by Case Management Agencies

- The PAS 2000 report generated by the Coupler provided two answers to certain questions when only one answer is acceptable. The problem was traced to the software and modifications were completed to correct the problem.

X. Focus Groups Meeting Summary

December 2000 - During the training sessions held in September 2000, the Home Health Agencies determined the need to integrate the body systems assessment unique to their agency with the OASIS assessment requirements as mandated by HCFA.

A decision was made by the Project Managers to allow the project participants to develop a comprehensive body systems review component satisfying the HCFA regulation to be incorporated into the Senior Assessment software.

A two-day meeting was held in December 2000, with representation from each participating agency, the BOSS, the BMS, and the WVMI.

After implementing the updated software, all three service types communicated that the modification fulfilled their needs and would assist with improving patient care overall.

June 2001 - During the monthly teleconferences held in early 2001, the Project Managers received multiple requests from the project participants to have another meeting in which each service type could exchange information, experiences, and discuss issues unique to their own work processes with their peers.

Half-day meetings were held June 11, 2001 for the Home Health Agencies, June 12, 2001 for the County Senior Programs, and June 13, 2001 for the Case Management agencies at the WVHCA with staff from the PKC Corporation and the WVHCA, the BMS, the BOSS, and the OHFLAC.

Issues and concerns discussed at these meetings are included in the chart located in Appendix F.

XI. West Virginia Expenditure Report for Pilot Project

WVHCA outlined the costs incurred during the pilot project (See Appendix G).

XII. Project Objectives Description and Status

The WVHCA and PKC mutually established the following project objectives:

Objective 1 - To provide point-of-care tools to assess the current health status, psychosocial, preventive care, social service, and risk profiles of West Virginia's senior and disabled populations in a comprehensive manner.

To fulfill this objective the Senior and Disabled Persons Assessment Coupler software was customized in four separate ways (see Refinements section on page 5) to meet the needs of the WV providers using the software in three different service types. The software is currently being used by four case management agencies, four county senior programs, and two home health agencies in their day-to-day work processes. (A summary of the findings is available in Appendix A.) The software meets this objective.

Objective 2 - To assist in the determination of medical eligibility by recommending a level of care and insuring the most appropriate plan of care for Medicaid Waiver services.

The software was modified to include Nursing Home level of care criteria to electronically document a client's level of care profile. It was also modified by incorporating the PAS 2000, the current paper-based system that is used to determine medical eligibility for services. A custom Crystal Report was created by the PKC Corporation to automatically generate a PAS 2000 report for electronic transmission to appropriate state agencies. The custom report for the PAS 2000 was found to have increased the length of the report from six pages to up to twenty-five pages, and was not well liked by the providers. Most of the agencies participating in the project reverted back to completing and submitting the hand written PAS 2000. Multiple attempts by the PKC Corporation to condense and shorten the Crystal Report PAS 2000 generated by the Senior and Disabled Persons Assessment Coupler were unsuccessful.

Objective 3 - To produce electronically retrievable data for statewide analysis, comparison of populations and services across populations, aggregate reporting for outcome studies, resource management, and long range strategic planning.

The data collected by the participants was required to be submitted to the WVHCA on a monthly basis where it is housed in an Oracle database. The information collected by the tool offers a detailed picture of each older and younger disabled person; including family relations, lifestyles, legal resources and needs, functional health, cognition, nutrition, medical conditions, and personal plans are addressed as they affect clinical care and social intervention. However, participants in the pilot did not regularly submit their data.

The Data and Public Information Division of the WVHCA believes that the PKC application is well designed to perform its primary task and it is an important tool for the assessment of our elderly population. Additionally, the consolidation of reporting requirements corresponds with the WVHCA's core goals.

The WVHCA recommends that the PKC Corporation add the ability to generate a normalized database and provide a Graphical User Interface (GUI) for querying the data. This is needed to facilitate research activities. WVHCA also recommends that the PKC Corporation proceed with the development of a web-based application to alleviate the huge support requirement that extending PKC products for general use will create.

Once the above recommendation is accomplished, this data can be used to develop reports containing client profiles, identify common risk factors, and tie specific data elements to specific topics, such as predictive factors for institutionalization, to assist in policy decisions and the allocation of scarce resources and to support the need for additional services (See Appendix E).

Due to the above-mentioned factors, WVHCA has been unable to generate reports based upon the data.

Objective 4 - To provide a method of electronically communicating the health care information of a client among health care providers for the efficient delivery of services across the continuum of care.

Early in the project a mutual decision was made by the WVHCA and the PKC Corporation to postpone electronic transmission of the data collected until problems with the software and phone lines could be resolved. At the beginning of the project, not all of the participants had e-mail capabilities. The Chief Information Officer with the WVHCA indicated that secure electronic transmission was not a cost-effective approach during the pilot phase.

Currently the data collected is saved on diskette by the participant and mailed to the WVHCA on a monthly basis.

Objective 5 - To provide access to additional coupler technology in order to enhance clinical decision-making, diagnosis, and management of conditions common to individuals with chronic illness.

The State of West Virginia was provided with the initial set of nine couplers identified below at the onset of the project:

1. Depressed Feelings, Fatigue, Apathy Diagnostic Coupler
2. Male Erectile Dysfunction Diagnostic Coupler
3. Sleep Problems Diagnostic Coupler
4. Urinary Incontinence Diagnostic Coupler
5. Dementia Management Coupler
6. Hypertension Management Coupler
7. Male Erectile Dysfunction Management Coupler
8. Pressure Ulcers Management Coupler
9. Smoking Cessation Management Coupler

As more was learned about West Virginia Health Status a decision was made to include additional couplers. With the updated software release in Spring 2001, the following couplers were added:

1. Dyspnea Diagnostic Coupler
2. Congestive Heart Failure Management Coupler
3. Chronic Obstructive Pulmonary Disease Management Coupler
4. Diabetes Management Coupler
5. Obesity/Overweight Management Coupler

All of the agencies were reminded and encouraged frequently throughout the project to use the additional Couplers available to them, but due to lack of time most agencies did not use the additional tools provided to them.

Summary

Objectives 1, 2, and 5 were met. Objective 3 was met in part. Objective 4 was deferred until the WVHCA has developed a procedure ensuring secure transmission of data.

XIII. Life Choices Assessment for the Olmstead Act

The interface and role of the Senior and Disabled Persons Assessment Coupler and the Life Choices Assessment for the Olmstead Act was fully explored with the appropriate parties within the State of West Virginia. Based upon those conversations and ideas for expanding the project beyond the pilot phase, it was determined that there would be no duplication of effort. Each assessment and process would support and augment the other. The Life Choices assessment process, as determined by the WV Olmstead Act Task Force, includes nursing homes, ICF-MRs, and psychiatric facilities. These provider types would complete the Life Choices Assessment annually, or upon request. Should the resident be transitioned to the community, the Senior and Disabled Persons Assessment Coupler (SADPAC) would be completed by the appropriate community agency for the creation and development of the care plan for services. Nursing homes, ICF-MRs, and psychiatric facilities would not be using the SADPAC as their assessment or care planning tool. Information gathered during the Life Choices assessment would augment the completion of the SADPAC in the community, and vice versa. A client served in the community who moves into one of these facilities would be referred with a completed SADPAC which would augment and enhance the care planning process conducted within these facilities. As a result, continuity of care is ensured, and the quality of care is improved as a result of holistic care planning across service and provider lines (See Appendix H).

XIV. Recommendations for the Development and Expansion of a Statewide Project

The results of the WV pilot project support a statewide expansion.

Expansion will require input and coordination from many State agencies, including the WVHCA, the BOSS, the BMS, the OHFLAC, the WVMI, and others, including community-based agencies who have a vested interest in any decision concerning the assessment of long-term care clients in the State of West Virginia. Community-based organizations involved to date include home health agencies, county senior programs, and case management organizations. Additional community-based organizations that may have a vested interest in the outcome of statewide expansion include nursing homes, hospital discharge planners, residential care homes, board and care homes, adult day programs, and consumer advocacy organizations.

With the introduction of any new statewide program, communication, coordination, and organization are paramount to success. PKC Corporation will continue to offer guidance and support to the statewide expansion effort, providing education and insight to the introduction of a powerful tool designed to transform the way healthcare services are delivered and the way healthcare knowledge is brought to bear on each consumer encounter with the healthcare system.

The following recommendations are made, based upon the learning experiences, input, and feedback from the previous pilot project year:

- Expansion should occur within a planned, regional deployment, incorporating a circle of providers in a given region responsible for the screening and management of older persons and younger persons with disabilities.
- Expansion efforts should include discussion of a train-the-trainer program, encouraging the identification of Coupler experts within the State of West Virginia to support the addition of Coupler users as determined by the State of West Virginia.
- Expansion should include a heightened focus on the sharing of Coupler session data across providers. Providers should begin to share common client data using the available technology to make electronic referrals, and to maximize the skills of each provider type to reduce redundant assessments, data collection, and data entry.
- The role and interface of the current long-term care providers with the acute care system, including primary care centers, rural health clinics, hospitals, and managed care, should be explored and discussed in order to ensure that clients served by providers using the Senior and Disabled Persons Assessment Coupler and the data and evidence-based recommendations produced by the Coupler are made available to providers outside of the long-term care system. Efforts in this area will greatly enhance the ability of the acute and long-term care systems to look at clients in a more holistic fashion.
- Expansion efforts should include a heightened focus on the use of the Management Couplers, including Diabetes, Hypertension, Congestive Heart Failure, COPD, Smoking Cessation, Asthma, and Dementia, high-cost diseases identified in the WV State Health Plan as some of the ten leading causes of death in the State. Increased use of these tools could bring improved standardization of data collected on these chronic conditions, as well as the application of best standards of practice, and evidence-based recommendations from the most current medical and social sciences literature. Such efforts could provide powerful information on the management of the highest cost chronic conditions in the State, and provide the data necessary to conduct outcome studies for statewide analysis.
- All state agencies mandating assessments should conduct a comprehensive review of all data elements being collected across provider types and eliminate duplicative mandated assessments by using one common tool across programs. Where there are required data elements that are necessary for documentation and/or communication to State and Federal

governments, it should be requested that the PKC Corporation build customized reports within the software to meet the needs of various agencies, rather than continue requiring providers to collect information multiple times using a myriad of paper assessments.

- A single entry point for long-term care services should be developed to reduce the perceived provider bias in the referral of clients to nursing homes and community-based programs. The Senior and Disabled Persons Assessment Coupler, in conjunction with other identified intake information, should be used as the common intake tool for entry into all long-term care programs.
- Technical needs and technical infrastructure issues need to be identified and addressed in order to insure that the full functionality and power of Couplers and an electronic platform is realized. Moving from a paper-based to electronic-based system will potentially require technical upgrades and new communication linkages. A phased, regional deployment will facilitate identification of the resources and time needed for the required technical infrastructure.
- A fully functional, accessible, and secure central repository of all Coupler session data should be constructed, maintained, and managed by an identified State entity. Access to this data should be available to identified organizations for the study, analysis, and production of outcome studies, population profiles, continuous quality improvement, cost-benefit analyses, and policy decisions.
- Exploration of the use of a Web-based platform for the future deployment of Problem-Knowledge Couplers should be conducted in the future to enhance access to knowledge tools, and provide direct consumer access to important healthcare information.

XV. Conclusion

West Virginia was attracted to the Senior and Disabled Persons Assessment Coupler because of its ease of use, comprehensiveness and ability to collect information at the point of care.

Upon full implementation, individuals applying for long-term care services in WV will receive a standard assessment and evaluation, and therefore, will receive the same opportunities and choices. Inappropriate placements and insufficient care will be reduced. Quality of care provided to elderly and disabled West Virginians will be improved with full use of the accompanying Diagnostic and Management Couplers selected to address individuals with chronic illness.

The use of the Senior and Disabled Persons Assessment Coupler and the additional Diagnostic and Management Couplers will provide economy of effort and cost by eliminating duplication that currently exists in the paper-based data collection system.

A centralized database will further assure continuity of care when an individual changes providers, due to either improvement or deterioration in his or her condition or for personal preference. The information will then belong to the patient, not the provider. Application and monitoring processes will be much easier and faster for both care providers and our senior population.

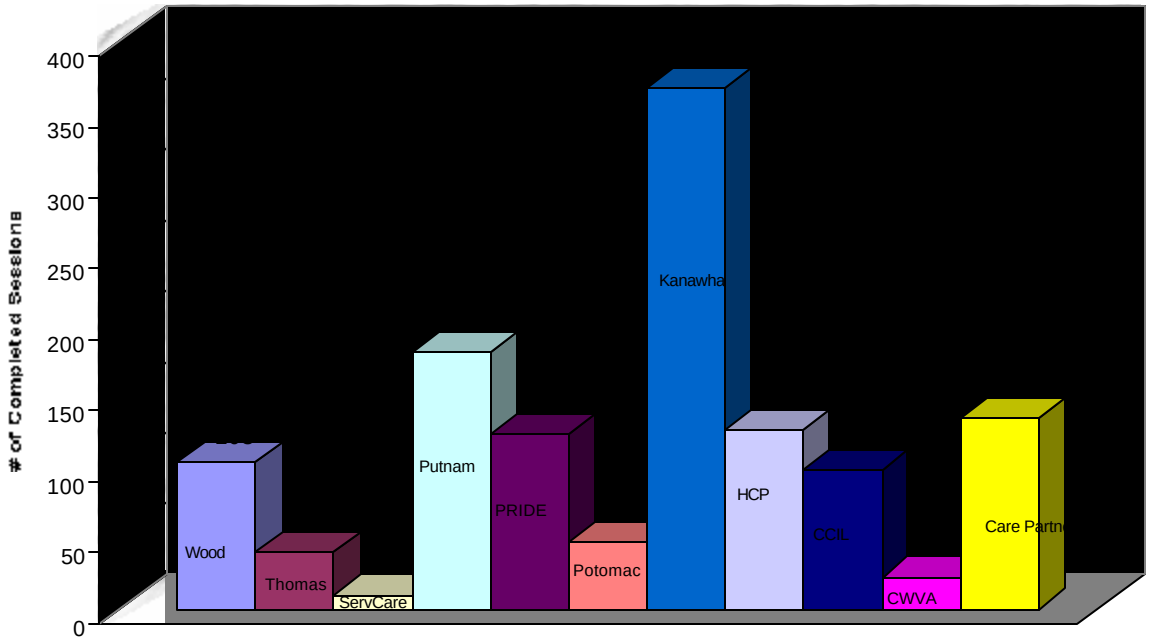
Home and Community Based agencies will be able to transform the delivery of care through the use of couplers by relying on standardized data that can guide agency decision making, strategic planning, continuous quality improvement, identify high risk patients and provide data for the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and the Centers for Medicaid and Medicare Services (formerly HCFA).

At the State level, the database constructed for the project will provide insight to other significant benefits. Summary information will assist policymakers in identifying areas of the State that are over or underserved. Medicaid will have more accurate information for rate setting, and researchers can pinpoint areas of the state where particular medical problems are more prevalent and help design programs to improve the health of West Virginians.

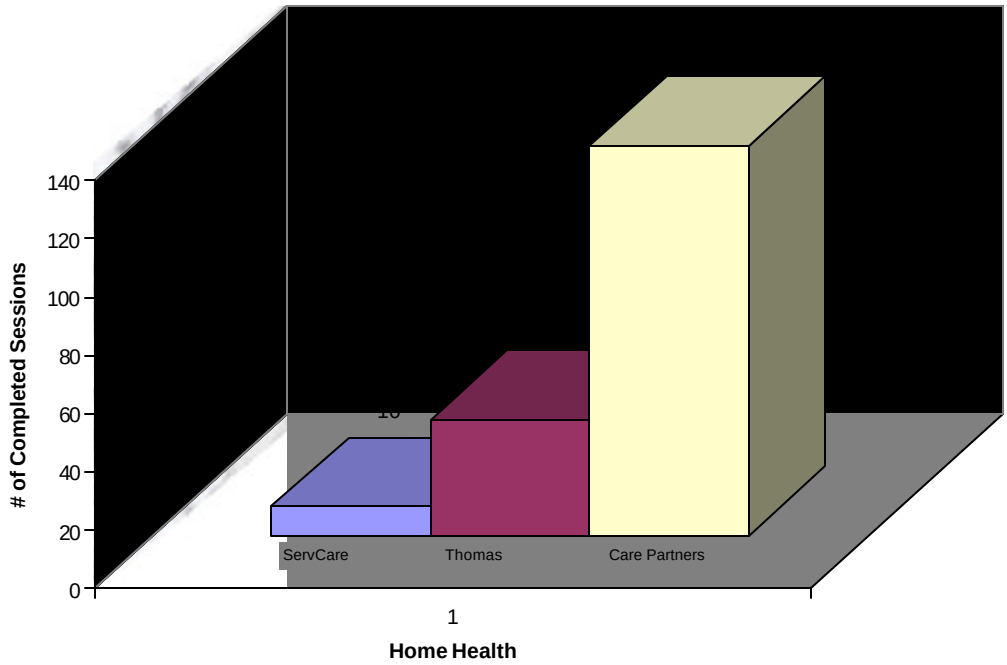
In conclusion, the majority of the project objectives were met and there was overall user and patient satisfaction with the tool. The WVHCA and PKC Corporation recommend statewide expansion, with regional deployment.

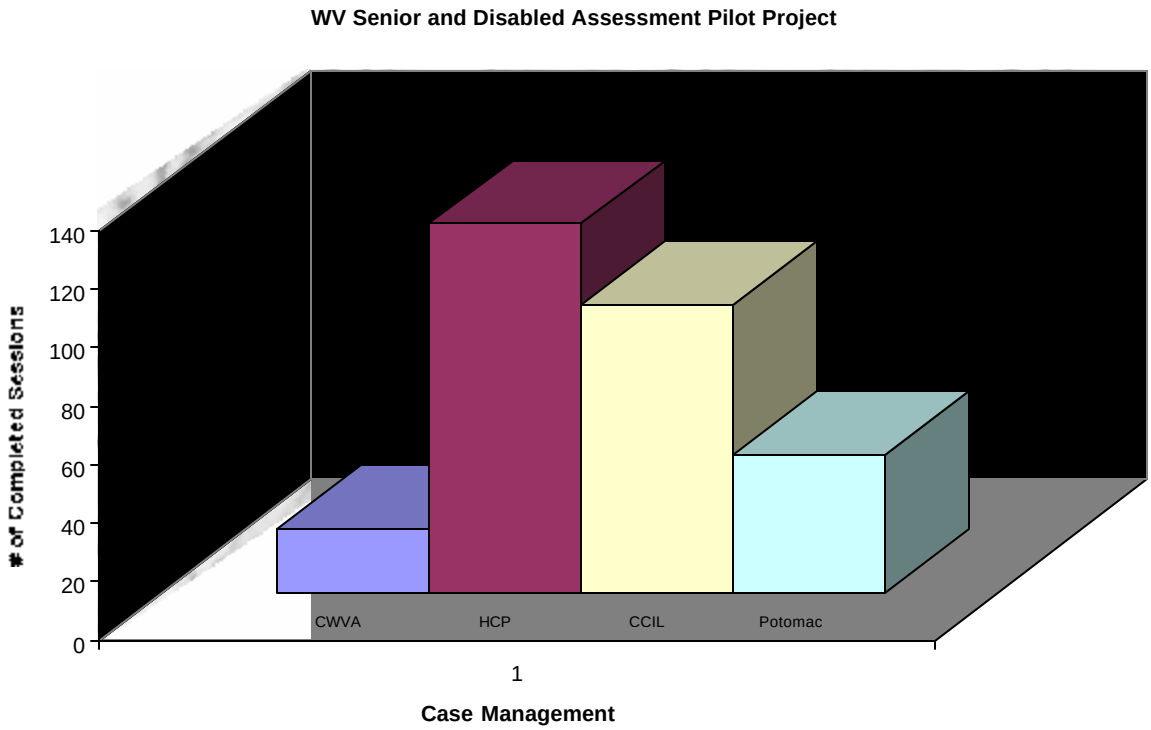
APPENDIX A

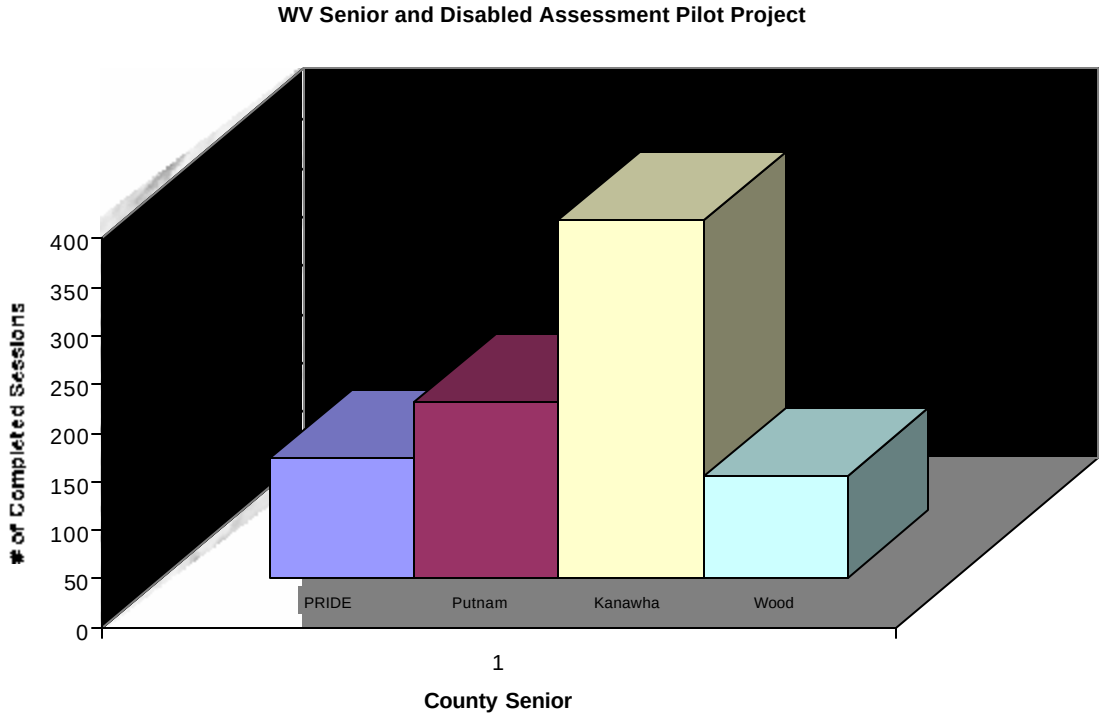
WV Senior and Disabled Assessment Pilot Project Agency Totals



WV Senior and Disabled Assessment Pilot Project




WV Senior and Disabled Assessment Pilot Project
# of Completed Sessions
140
120
100
80
60
40
20
0
CWVA
HCP
CCIL
Potomac
1
Case Management


WV Senior and Disabled Assessment Pilot Project
# of Completed Sessions
400
350
300
250
200
150
100
50
0
PRIDE
Putnam
Kanawha
Wood
1
County Senior

APPENDIX B
West Virginia Senior and Disabled Pilot Project Survey

1. How many Coupler sessions did you complete?
   _____1 to 10
   _____11 to 20
   _____21 to 30
   _____31 to 50
   _____More than 50

2. How long did it take to complete the average session?
   _____Less than 1 hour
   _____1 to 2 hours
   _____2 to 3 hours
   _____Greater than 3 hours
   Comments

3. How many forms, if any, was the Coupler output able to replace?
   _____None
   _____1
   _____2
   _____3
   _____4
   _____More than 4

4. What forms were you able to replace?

5. What forms would you like to see the Coupler output replace?

6. What reports would you find helpful?

7. Have you been able to use the automated PAS 2000 to replace the paper PAS 2000?
   _____Yes
   _____No
   Comments

8. Have you submitted the automated PAS 2000 to WVMI? If yes, how many?
_____Yes
_____No
Comments

9. Has the encounter report been helpful?
_____Yes
_____No
Explain

10. Would you recommend that your agency continue to use the Senior and Disabled Assessment Coupler?
_____Yes
_____No
Explain

11. Would you recommend the Health Care Authority pursue a statewide implementation of the Senior and Disabled Assessment Coupler?
_____Yes
_____No
Explain

12. Please describe the reaction of your clients to the use of the Coupler?

13. Have you submitted output from the Senior and Disabled Assessment Coupler to physicians?
_____Yes
Describe Reaction

_____No

14. How many times have you used the diagnostic and management Couplers?
_____Never
_____1 to 5
_____6 to 10
_____More than 10
Comments

15. If you have used the diagnostic and management Couplers, did you find they aided you in the care of your clients?
_____Yes
_____No
Comments

16. If you have used the diagnostic and management Couplers, which ones did you find most useful?

Why?

17. Were you satisfied with the customer support you received?
_____Yes
_____No
Comments

18. Was it easy to submit monthly reports using the PKC.WVHCA web site?
_____Yes
_____No
Comments

19. Was the installation process for the Couplers easy?
_____Yes
_____No
Comments

20. Was it easy to complete the X-merge process to submit your data on a monthly basis?
_____Yes
_____No
Comments

21. Agency type
_____Home Health Agency
_____County Senior Program
_____Case Management Agency

22. Any additional comments you would like to add regarding the project?

User Testimonials

The following are testimonials received from agency users during the course of the project:

"I feel that my nursing care has taken on a more holistic approach and that my clients (seniors and disabled individuals) have benefited greatly."

"These times with my clients have become more spontaneous and more inclusive of their feelings in addition to their physical well-being. "

"These precious individuals have gone from being confronted with a stiff, restricted inquiry to a program that addresses all of the body systems and psychosocial aspects of their care. I personally feel that their care is enhanced by this specificity, and I know that I can take comfort in the knowledge that I have thoroughly confronted many once overlooked issues."

"Thank you for the opportunity to participate in such an exciting and worthwhile endeavor."

"It [SAC] has facilitated the development of plans of care that encompass the entire range of services, social as well as health care, necessary to maintaining the Waiver client in the home/community, and out of nursing homes, as long as possible."

"As West Virginia increases the range of services available through its Waiver Program, the SAC should prove to be an even more powerful assessment and care planning tool – a tool that is integral to and especially lends itself to the case"

"Many people do not like change, the computers were a change for us, they took some getting use to and adapting to, but once learned, they became another way of doing our job."

"I can see where the tools in the couplers for teaching, could be expanded to a vast amount of information, just at your fingertips, that could be very beneficial and helpful in educating our clients."

"Having the PAS-2000 in the computer to be used universally is a great idea. If we can exchange the information we gather between the different levels of care that our in-home clients receive from housekeeping to bathing programs to Community Care, Medicaid Waiver, Skilled Nursing, Hospital, and Nursing Home, I think it could be very helpful to all concerned, less stress for clients who have to go through the process over and over again."

"The amount of knowledge available to any clinician, as well as to patients themselves, astounds me with each new situation. I really feel that this could be the streamline to Health Care. To have volumes of knowledge at our fingertips that are easily accessible

with Patient history information and individualizes output information for each patient is truly a dream come true!!!“

“The findings summary reports a vital piece of information to share with the Physicians as well as with the clients so that all involved in the clients care can have access to identical information. We have also found that patients are impressed that this information is so "up-to-date" and accessible. We feel that it builds confidence for the client in the care that they are receiving.“

APPENDIX C

West Virginia Senior and Disabled Pilot Project Survey Results

1. How many Coupler sessions did you complete?	
?? 1 to 10	2
?? 11 to 20	3
?? 21 to 30	2
?? 31 to 50	2
?? More than 50	9
2. How long did it take to complete the average session?	
?? Less than 1 hour	
?? 1 to 2 hours	12
?? 2 to 3 hours	6
?? Greater than 3 hours	
?? Comments	
3. How many forms, if any, was the Coupler output able to replace?	
?? None	3
?? 1	5
?? 2	3
?? 3	3
?? 4	4
?? More than 4	
4. What forms were you able to replace?	OASIS Assessment, Nurses Notes, PAS 2000, Personal Care Nursing Assessment, Nutritional Assessment, RN-01, Social Assessment, Nursing Assessment, Med Sheet, ADL Scale, CM-2A
5. What forms would you like to see the Coupler output replace?	Med Sheets, Nursing Plan, 485 Plan of Care, OASIS, Teaching Sheet, Whole Admission, 6 mo, 9 mo, initial assessment, PIF report, Billing Sheet, Personal Care Daily Log, BIF
6. What reports would you find helpful?	Pt Progress Report, Problem Identification, Encounter
7. Have you been able to use the automated PAS 2000 to replace the paper PAS 2000?	
?? Yes	8
?? No	6
?? Comments	Too many pages, Not complete enough

8. Have you submitted the automated PAS 2000 to WVMI? If yes, how many?	
?? Yes	1
?? No	14
?? Comments	Does not apply to the community care program
9. Has the encounter report been helpful?	
?? Yes	15
?? No	3
?? Explain	Reads mores like a note
10. Would you recommend that your agency continue to use the Senior and Disabled Assessment Coupler?	
?? Yes	15
?? No	2
?? Maybe	1
?? Explain	
11. Would you recommend the Health Care Authority pursue a statewide implementation of the Senior and Disabled Assessment Coupler?	
?? Yes	14
?? No	2
?? Maybe	1
?? Explain	
12. Please describe the reaction of your clients to the use of the Coupler?	
13. Have you submitted output from the Senior and Disabled Assessment Coupler to physicians?	
?? Yes	6
?? Describe Reaction	
?? No	12
??	
14. How many times have you used the diagnostic and management Couplers?	
?? Never	5
?? 1 to 5	8
?? 6 to 10	2
?? More than 10	1
?? Comments	

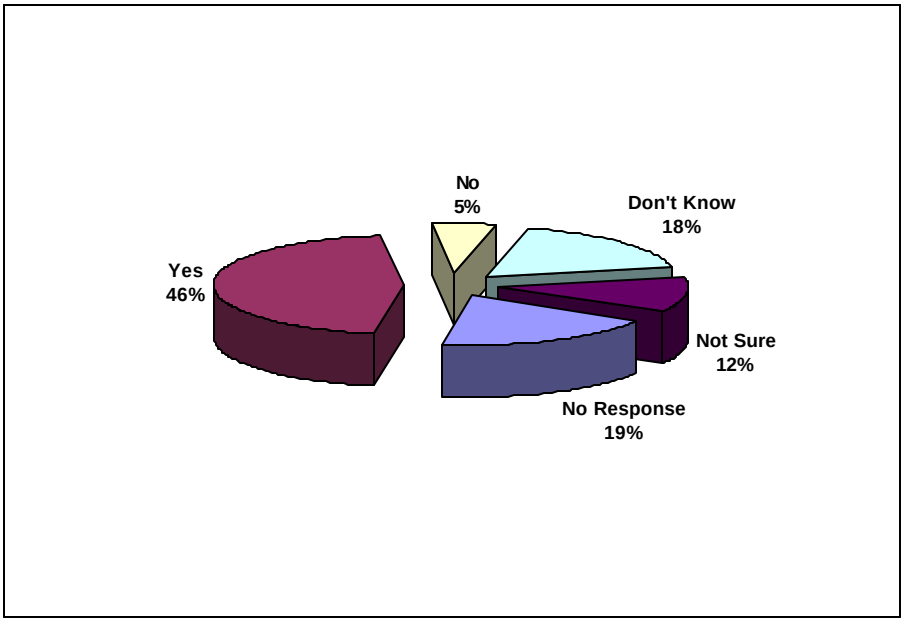
15. If you have used the diagnostic and management Couplers, did you find they aided you in the care of your clients?	
?? Yes	5
?? No	4
?? Comments	
16. If you have used the diagnostic and management Couplers, which ones did you find most useful?	
Why?	
17. Were you satisfied with the customer support you received?	
?? Yes	17
?? No	
?? Comments	
18. Was it easy to submit monthly reports using the PKC/WVHCA web site?	
?? Yes	10
?? No	1
?? Comments	
19. Was the installation process for the Couplers easy?	
?? Yes	11
?? No	1
?? Comments	
20. Was it easy to complete the X-merge process to submit your data on a monthly basis?	
?? Yes	11
?? No	1
?? Comments	
21. Agency type	
?? Home Health Agency	4
?? County Senior Program	7
?? Case Management Agency	7
22. Any additional comments you would like to add regarding the project?	

APPENDIX D

SENIOR AND DISABLED PERSONS ASSESSMENT COUPLER
PATIENT SATISFACTION QUESTIONNAIRE

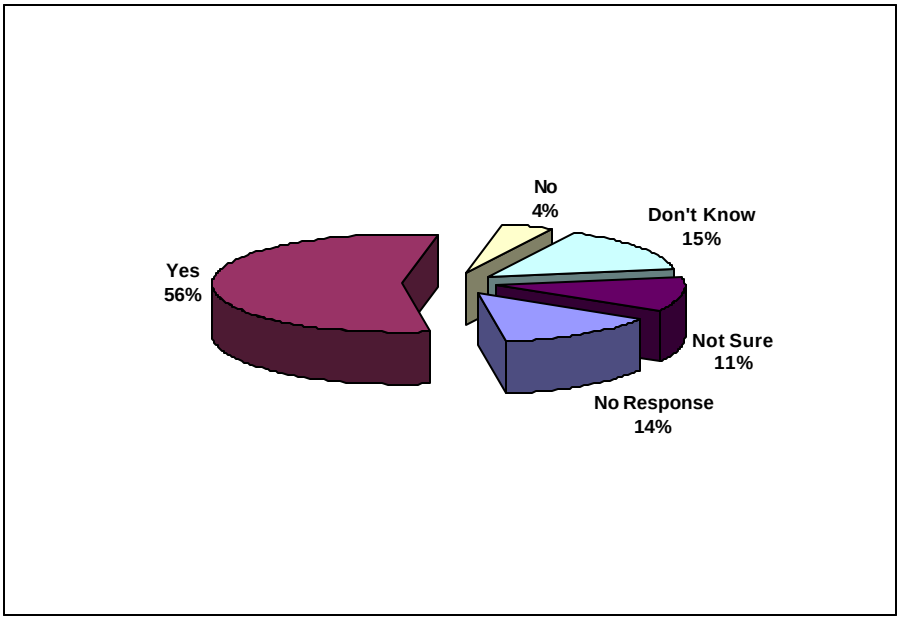
1) I like using the computer program designed for seniors and individuals who are disabled when my Nurse or Social Worker visits me at home:

Yes No Don't Know Not Sure



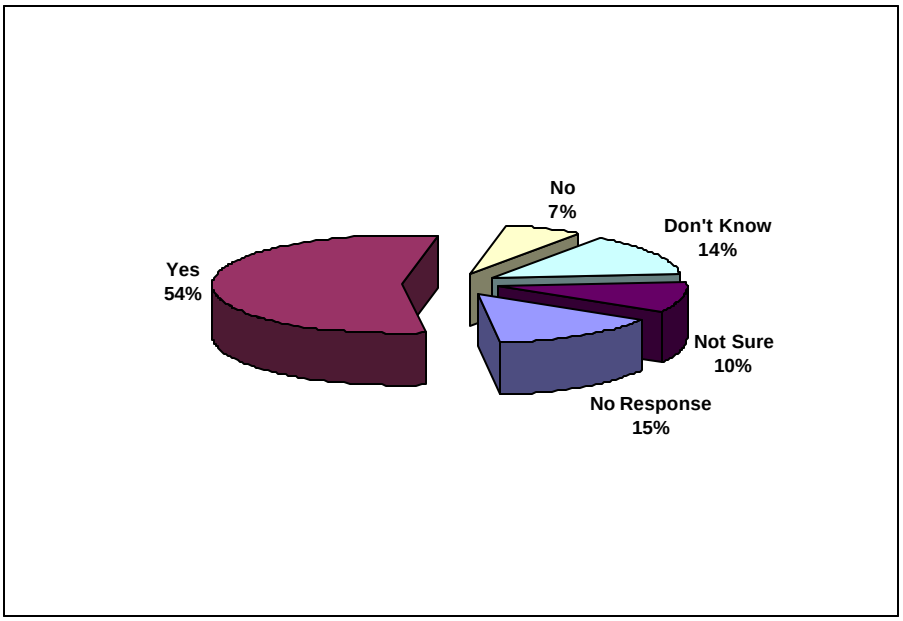
2) My Nurse or Social Worker seemed to like using the computer program to assess my medical needs:

Yes No Don't Know Not Sure



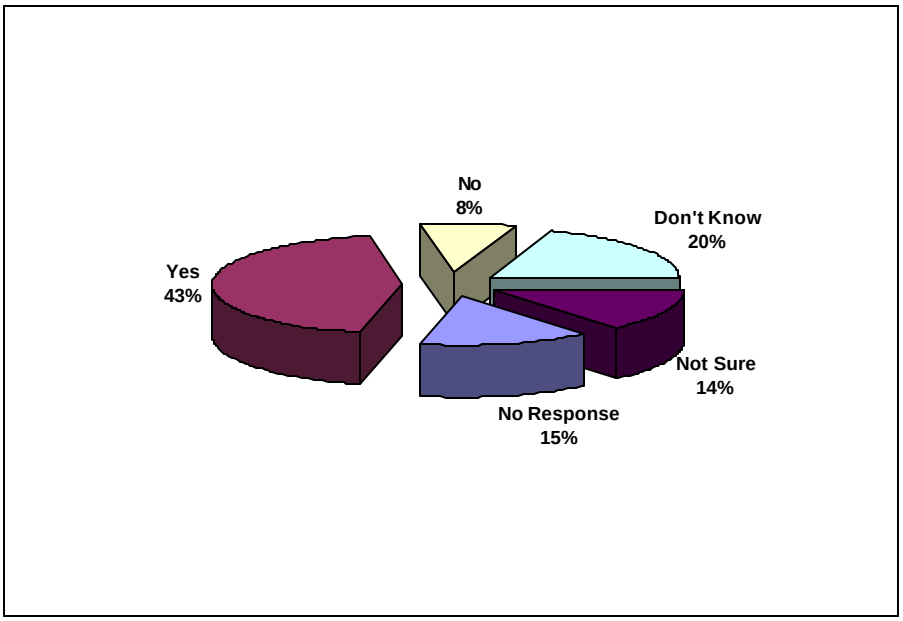
3) I would be willing to use the program designed for seniors and individuals who are disabled again:

Yes No Don't Know Not Sure



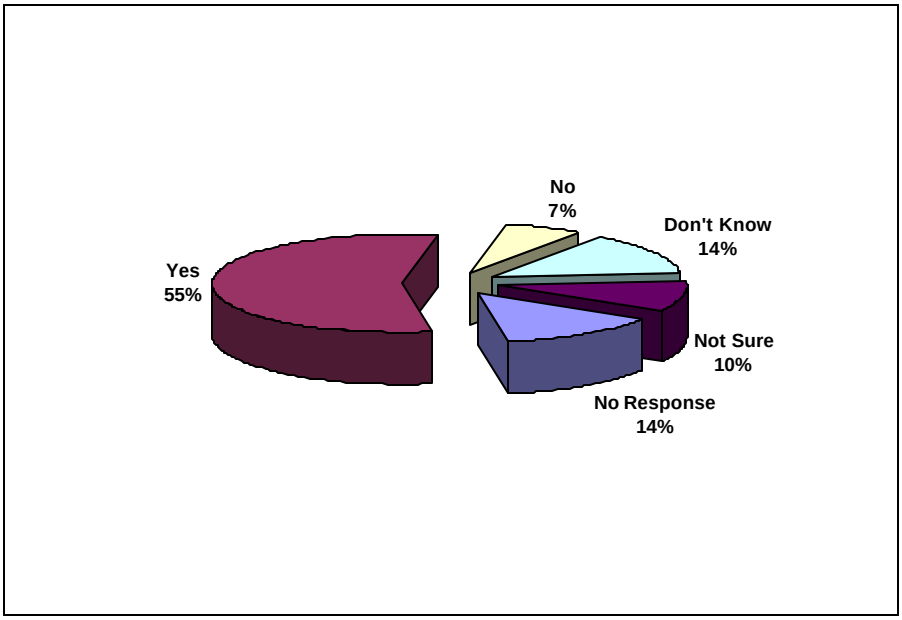
4) The use of this program allowed me to participate more in my health care:

Yes No Don't Know Not Sure



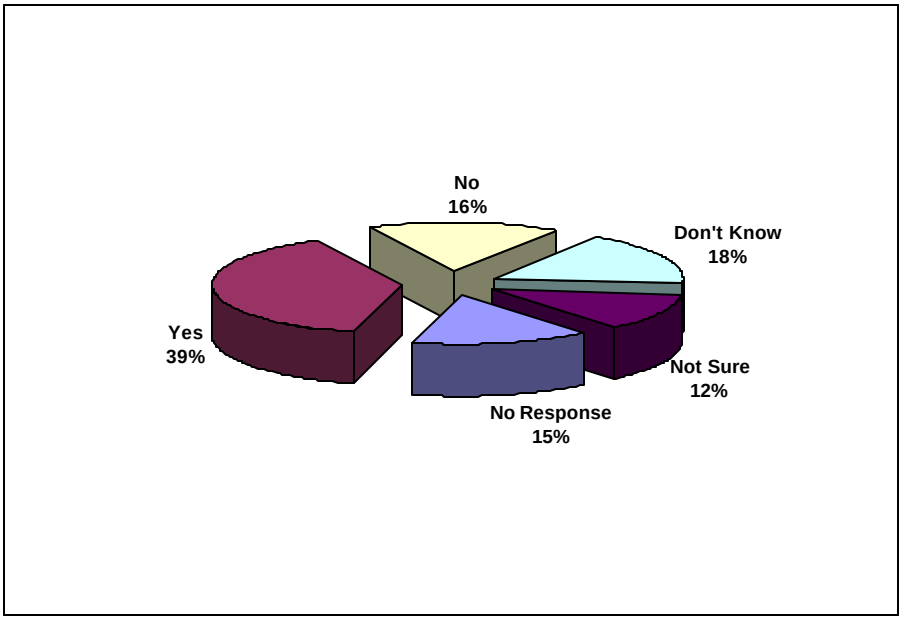
5) The use of this computer program allowed my nurse or social worker to gather more information about me:

Yes No Don't Know Not Sure



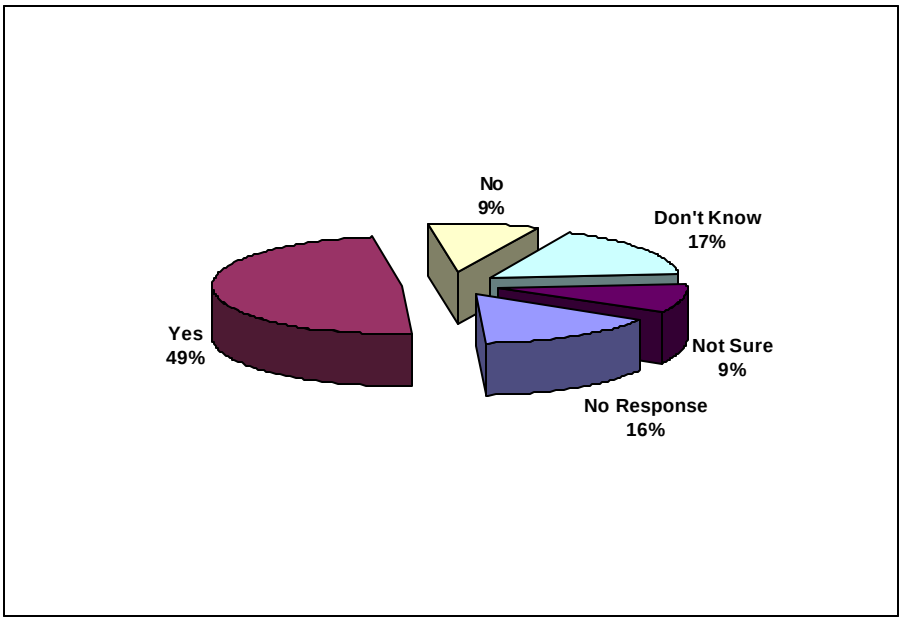
6) The use of the computer program helped me to better understand my health:

Yes No Don't Know Not Sure



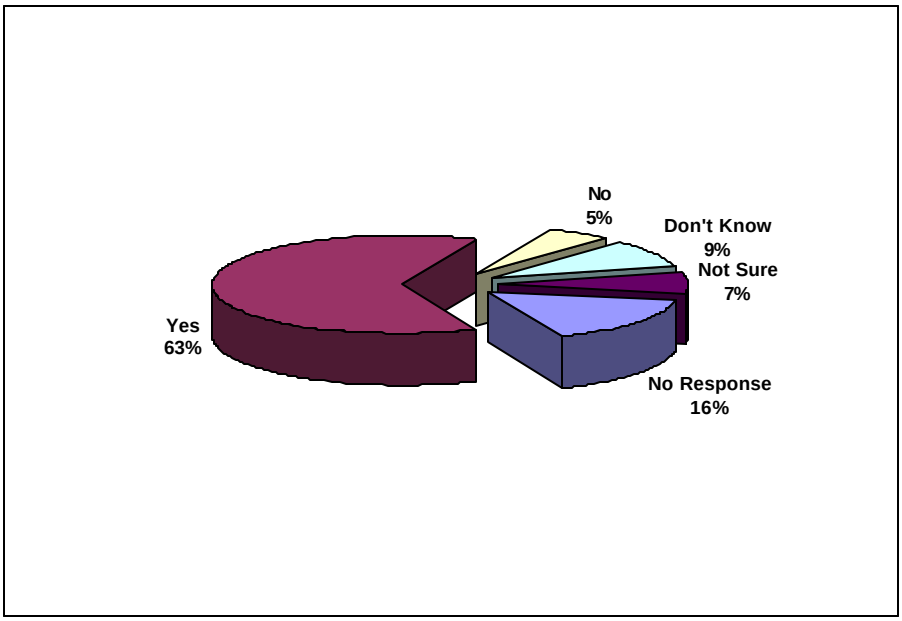
7) The use of the computer program helped make better use of my time during the visit with my Nurse or Social Worker:

Yes No Don't Know Not Sure

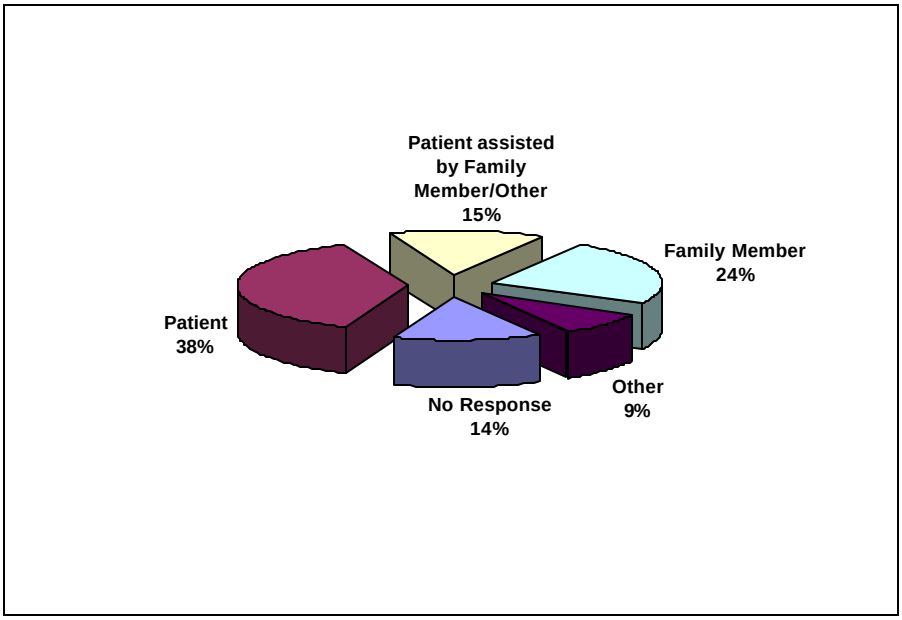


8) The amount of time required by my Nurse or Social Worker to complete the assessment in my home was acceptable.

Yes No Don't Know Not Sure



9) This questionnaire was completed by (circle one):
Patient Patient assisted by Family Member/Other Family Member Other



Other Comments: (Note: Not all respondents commented.)

Questionnaire 2: I have only had one computer visit. I think it is too soon for me to give an accurate assessment.

Questionnaire 3: I like it better when we just talk.

Questionnaire 12: I really do not see that the computer in any way affected my mother's experience with the nurse. It was only used on her intake and I really didn't see that it added anything to the interview, and in fact believe the nurse's concentration on operating the program took away from the interpersonal communication we'd had before when the nurse just took notes at the time of my father's intake. I don't mean this to be a negative report, but the only advantage I see with using the computer is it locks in data that can be transmitted wherever needed and it would be legible to anyone who needed to read it.

Questionnaire 14: Patient is 92 yr. old and cannot remember.

Questionnaire 15: I do not own a computer and therefore cannot answer these questions with an honest response.

Questionnaire 17: The part of being able to use the program. I'm not sure if the question means my actual use or my nurse's use as applied to me.

Questionnaire 20: I was very pleased with it.

Questionnaire 21: Computer/paper does not make a difference.

Questionnaire 24: They asked so many questions. I felt it was much better when we just talked and she wrote it down.

Questionnaire 25: I think it was a real good idea for the computer to come in my home.

Questionnaire 27: I think that this questionnaire helps me to better know my nurse in a very personal way. We get to know each other better.

Questionnaire 30: My social worker does not use a computer when she visits me.

Questionnaire 32: Have no idea what you are talking about!

Questionnaire 37: I have a computer I use, but it has been broken down for some time, trying to get it fixed - hope it will be soon.

Questionnaire 38: My computer was NOT used by my visiting nurse or myself during my home physical therapy program.

Questionnaire 40: Not able to use a computer because of arthritis in my fingers and no one lives with me who could use it.

Questionnaire 45: I only had a nurse for a total of two weeks after my surgery. My husband did everything for me. I don't like everybody knowing my business. You shouldn't have information on me. It's supposed to be confidential but you have it.

Questionnaire 46: I had surgery at Cleveland Clinic in February. I had a home care nurse two days there and three days after return from Cleveland. Don't now why this was sent to me. I surely don't have a nurse or social worker or computer.

Questionnaire 49: I want one of the computers. You can put one in my home for my use also if you want (Joke). I am a polio victim in a wheel chair.

Questionnaire 50: I am unaware of any use of a computer by the aid or nurse while in my home. I never saw nor was told of a computer program.

Questionnaire 51: We are unaware of anything like this. No one has ever spoken to us about this program.

Questionnaire 52: I am not sure if I understood this questionnaire so I just answered it the best I could to my knowledge.

Questionnaire 54: Really did not understand the letter.

Questionnaire 56: I really enjoy the program and services I get.

Questionnaire 57: I am his sister and caregiver. I have not been told anything about a computer so I have no idea about any computer.

Questionnaire 62: I think you sent this to the wrong person. I've never seen one here for me to use.

Questionnaire 65: Never completed due to my poor health and illness.

Questionnaire 69: Don't have a computer or know anything about one.

Questionnaire 72: My mother is 101. I had to fill this out for her. She needs all the help she can get to keep her out of the nursing home.

Questionnaire 79: Didn't know CCIL did this. They did not have a computer here.

Questionnaire 81: Never saw a computer. Could not use a computer anyway.

Questionnaire 83: We had no idea about the program.

Questionnaire 87: Patient is deceased.

Questionnaire 88: I really enjoy the services I get from the program.

Questionnaire 89: My nurse is working on getting me on the waiver program to get more hours for me. At present, I'm only on personal care.

Questionnaire 91: I like the computerized system.

Questionnaire 92: Except therapist. I thought he should have continued the therapy longer.

Questionnaire 93: I don't have a computer.

Questionnaire 95: I'm an old lady 80 years old. Don't know a darn thing of computers. As Regis says, I'm too old to learn.

Questionnaire 101: I think the computer is a good tool, but I think the social worker and the nurse need separate ones!

Questionnaire 105: My mother is not aware of the nurse using a computer program on her last visit.

Questionnaire 106: I was not impressed by the program. It asked questions that were not necessary to my care or health.

Questionnaire 107: Patient died May 31, 2001 at Logan General Hospital.

Questionnaire 109: It interfered with the ability to interact with my nurse and social worker.

Questionnaire 111: Don't have a computer.

Questionnaire 112: No computer.

Questionnaire 114: Did not like the computer. It was too long.

Questionnaire 115: Patient passed away 11-07-00. Thank all of you for your help and assistance.

Questionnaire 116: The Mrs. and I have both had home health care at different times in the last two years, but no one has ever had a computer.

Questionnaire 117: I don't know one thing about computers - don't want to - and do not want to start at 78 years old.

Questionnaire 118: No computer program was used at our home or with our child.

Questionnaire 120: I do not own a computer nor am I disabled. I am not in need of any nurse at this time.

Questionnaire 122: I surely appreciate the service I receive from my social worker very much.

Questionnaire 123: At this time, I'm not familiar enough with the program to give a fair assessment. However, in-home health care is so desperately needed in this home that I'm in favor of anything that makes it possible.

Questionnaire 129: No computer. I don't need it.

Questionnaire 132: She is not able - mentally or physically.

Questionnaire 133: I have not even used a computer. I know nothing about computers. The nurse used a computer two times.

Questionnaire 134: The nurse was respectful and caring. Making sure I understood every detail.

Questionnaire 136: I haven't been able to hear anything for a long time. I have been using hearing aids for a long time. The doctor made me two. I wear them in both ears. They didn't last long. I borrowed the money from the Putnam County Bank, $1,539. The next one I got cost about $1,123. I am also legally blind. The nurse that was coming here, Martha

Beckelhimer, she was really nice. Last Tuesday was her last day. She was going to Columbus, Ohio.

Questionnaire 137: As of 01/01, the patient has been in Logan Park Care Nursing Center.

Questionnaire 141: First time I've heard about this program.

Questionnaire 142: My family and I are unaware of this computer program.

Questionnaire 143: This is to inform you that the patient moved to Fulda, Minnesota on July 10, 2001.

Questionnaire 145: This program has helped me, more than I can say. I'm extremely grateful to all involved.

Questionnaire 146: Don't get into computers - sorry.

Questionnaire 147: I am blind - the computer did not help me personally. It seemed to help my worker with my health care and records.

Questionnaire 148: No computer used.

Questionnaire 149: Cheryl is a good nurse. Pat is also very good.

Questionnaire 151: I suppose it's okay. Everything is computerized anyway. I guess if that's what they have to do. They have to take a personal life history anyway.

Questionnaire 152: It is a lot faster and more convenient.

Questionnaire 157: I appreciated Martha's time.

Questionnaire 158: I do not understand. I don't have a computer.

Questionnaire 160: Couldn't understand much about this questionnaire. Thanks for your interest in my health care.

Questionnaire 165: I'm sorry I won't be much help to your new project concerning the use of computers and disabled senior citizens. Fortunately, my disability was due to a broken leg. Although the injury was severe, I only required home health care on a part-time/temporary basis. I did not have the opportunity to make use of this particular program. I am agreeable to having my particular information entered on your computer, provided there would be certain restraints which would prohibit this information from being provided and accessible to the general public. I don't quite know exactly how this program would work. Since I am familiar with computers, I would assume your program is geared to assist nurses and social workers do their job better, and with more knowledge available to them in a quicker timeframe. If so, I'm all for your program. I think it would be of particular help in our state where there is such a shortage of medical personnel. I do wish there would be more doctors available to treat geriatric patients - with so many new medicines on the market, it's often too easy to slip an older person some samples in a "if this don't work, we'll try something else" fashion. Unfortunately, it is a poor way of doctoring elderly people. Thank you for the opportunity to contribute to your program. I hope I gave you some information that will be helpful to you.

Questionnaire 168: The nurse or social worker is only going to know what I tell her so no computer is helpful.

Questionnaire 170: I don't have a computer, but I would like to have one.

Questionnaire 171: She helps me a lot with answers for my husband and myself.

Questionnaire 172: Deceased.

Questionnaire 175: I never heard the patient say the nurse or social worker ever used a computer — she could not use one.

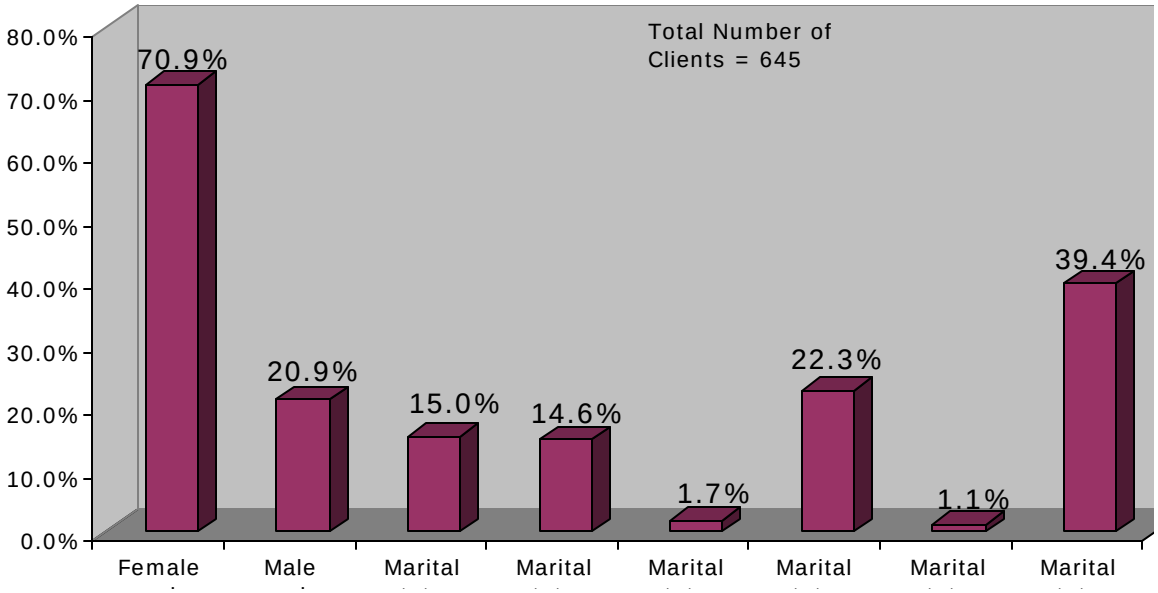
Questionnaire 176: My mother has dementia and gets really confused when questioned at length about things. She is probably not aware the worker was using a computer.

Questionnaire Data Summary

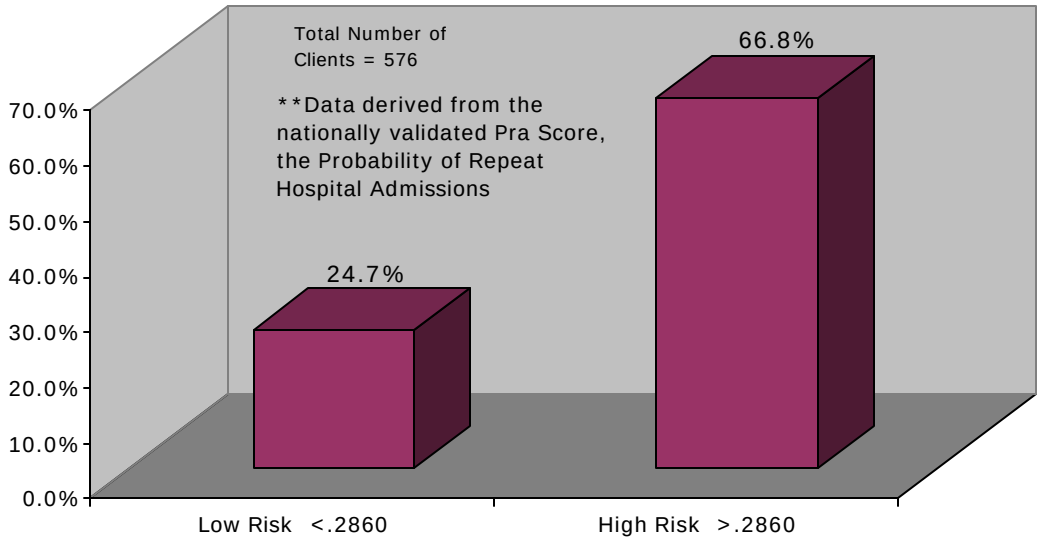
	Question								
Response	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
No Response	35	26	27	27	26	28	29	29	-
Yes	83	101	100	79	101	70	88	114	-
No	10	8	12	15	12	30	17	10	-
Don't Know	33	27	25	36	25	32	31	17	-
Not Sure	21	20	18	25	18	22	17	12	-
Total	**182**	**182**	**182**	**182**	**182**	**182**	**182**	**182**	**-**
No Response	-	-	-	-	-	-	-	-	26
Patient	-	-	-	-	-	-	-	-	69
Patient assisted by Family Member/Other	-	-	-	-	-	-	-	-	27
Family Member	-	-	-	-	-	-	-	-	44
Other	-	-	-	-	-	-	-	-	16
Total	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**182**

APPENDIX E
Data Evaluation

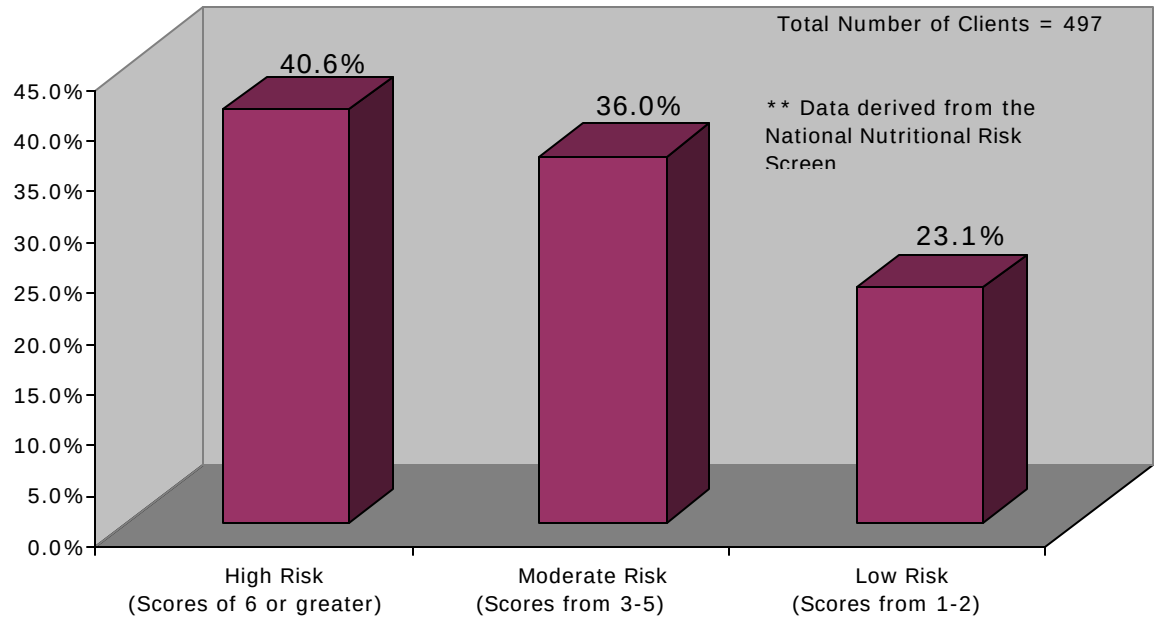
WV Senior and Disabled Persons Assessment Project Data
Descriptive Statistics



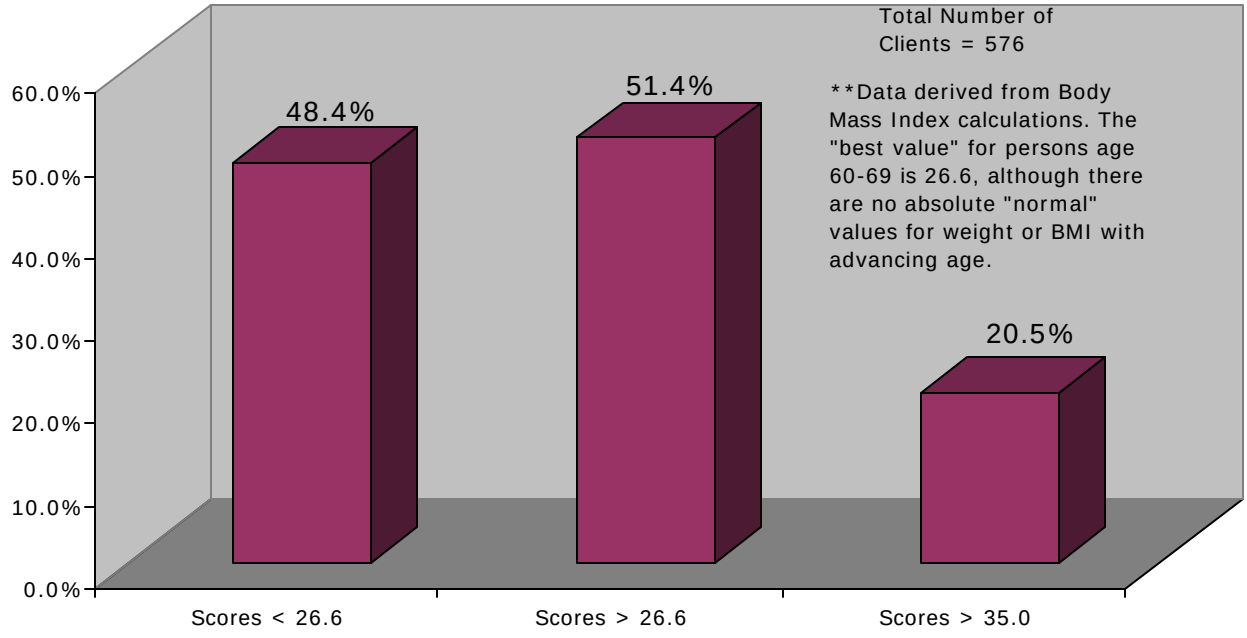
WV Senior and Disabled Persons Assessment Project Data
Probability of Repeat Admissions Scores



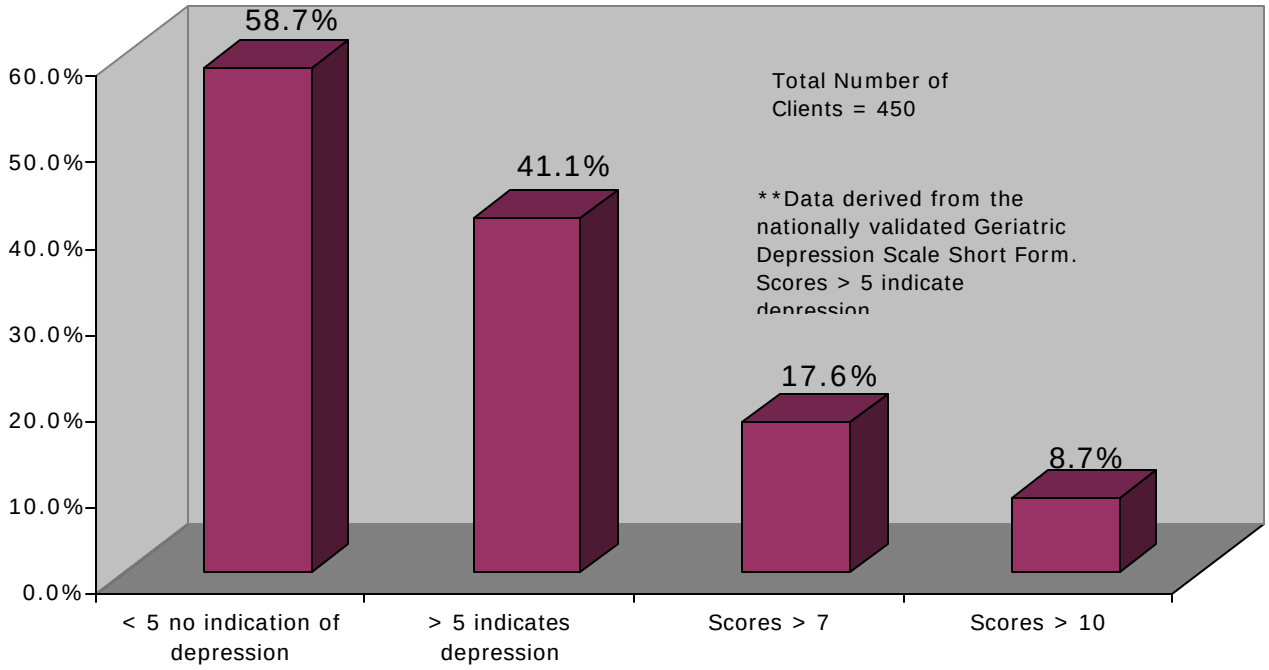
WV Senior and Disabled Persons Assessment Project Data
Nutritional Risk



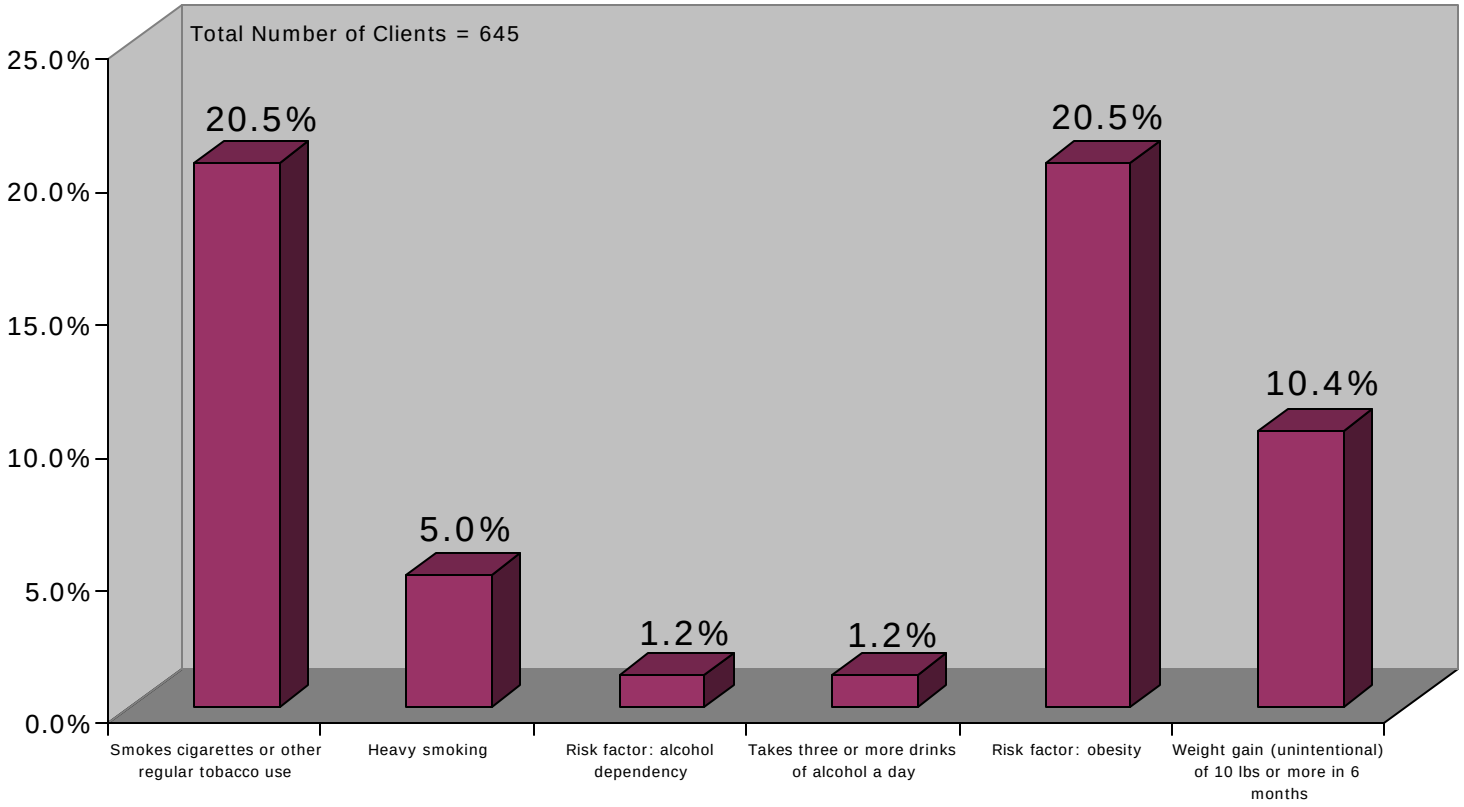
WV Senior and Disabled Persons Assessment Project Data
Body Mass Index Scores



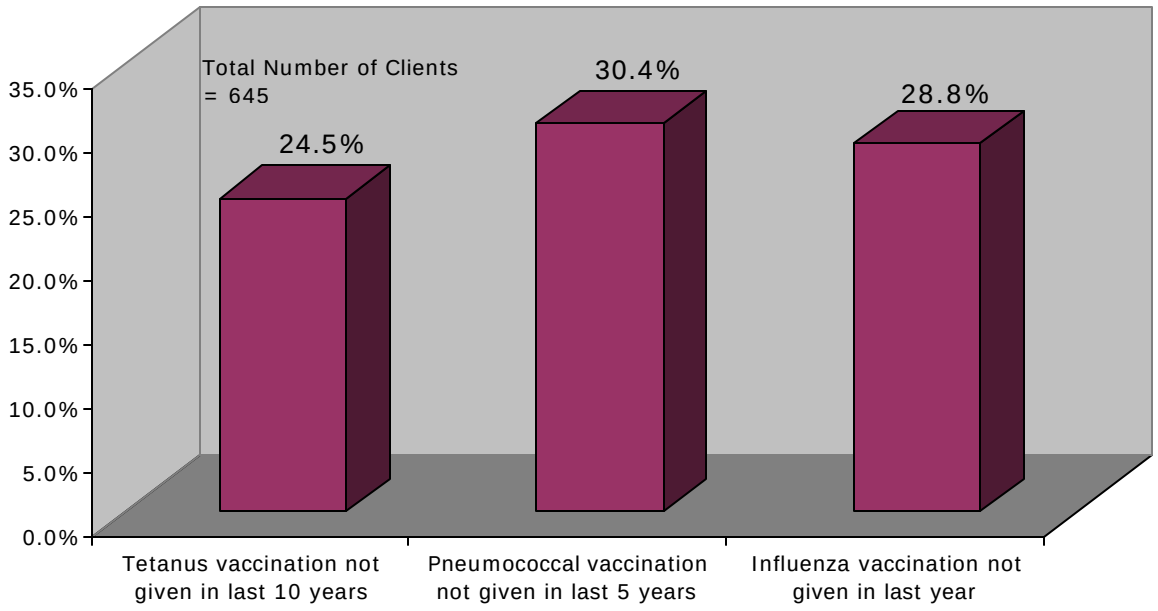
WV Senior and Disabled Persons Assessment Project Data
Geriatric Depression



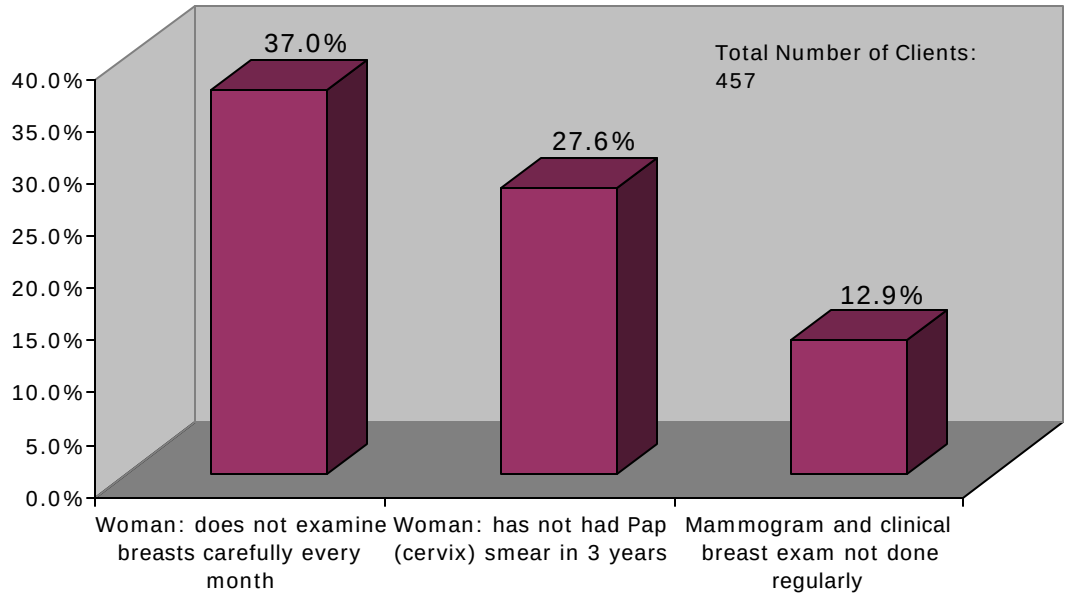
WV Senior and Disabled Persons Assessment Project Data
Health Risk Factors



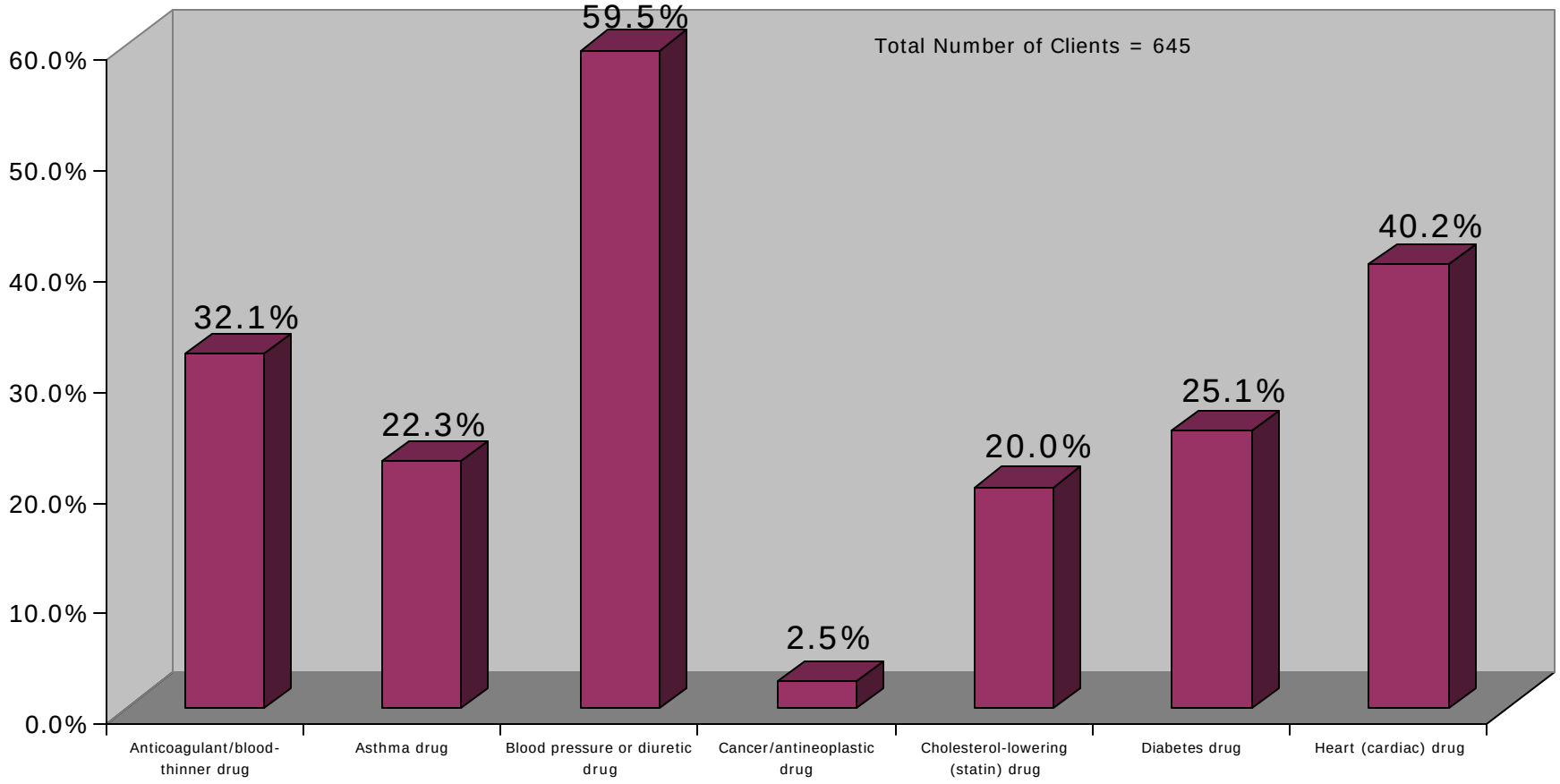
WV Senior and Disabled Persons Assessment Project Data
Vaccination Status



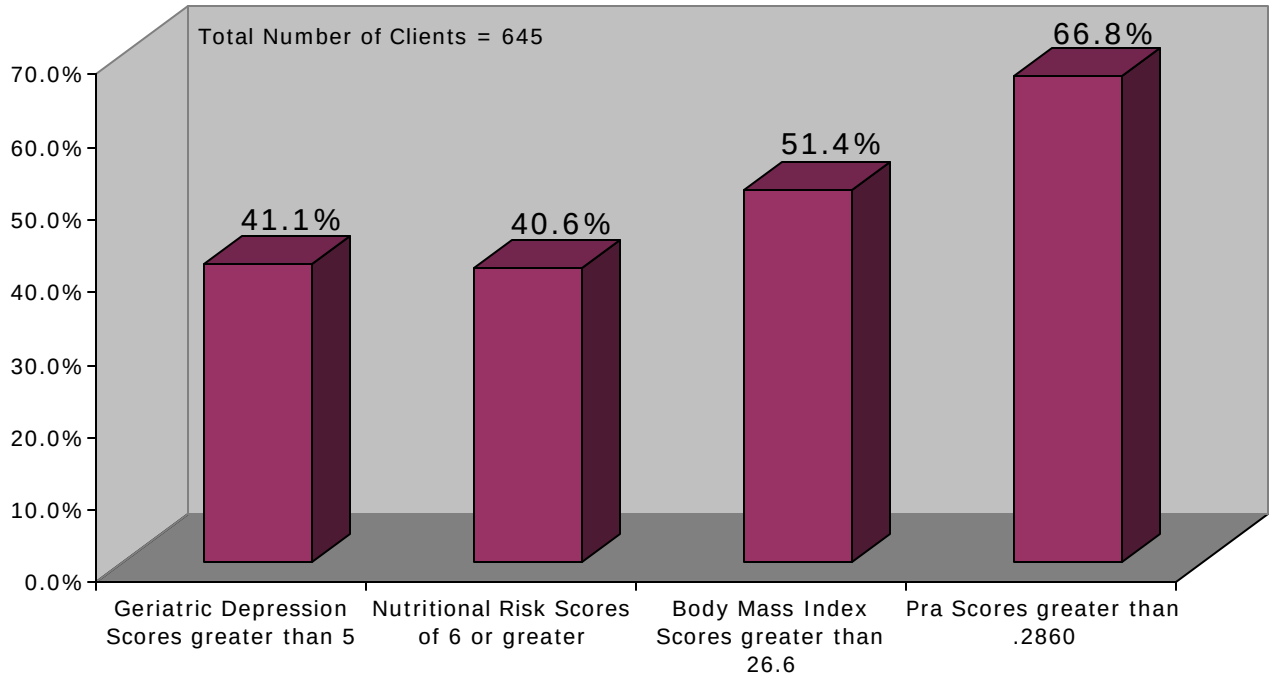
WV Senior and Disabled Persons Assessment Project Data
Women's Health



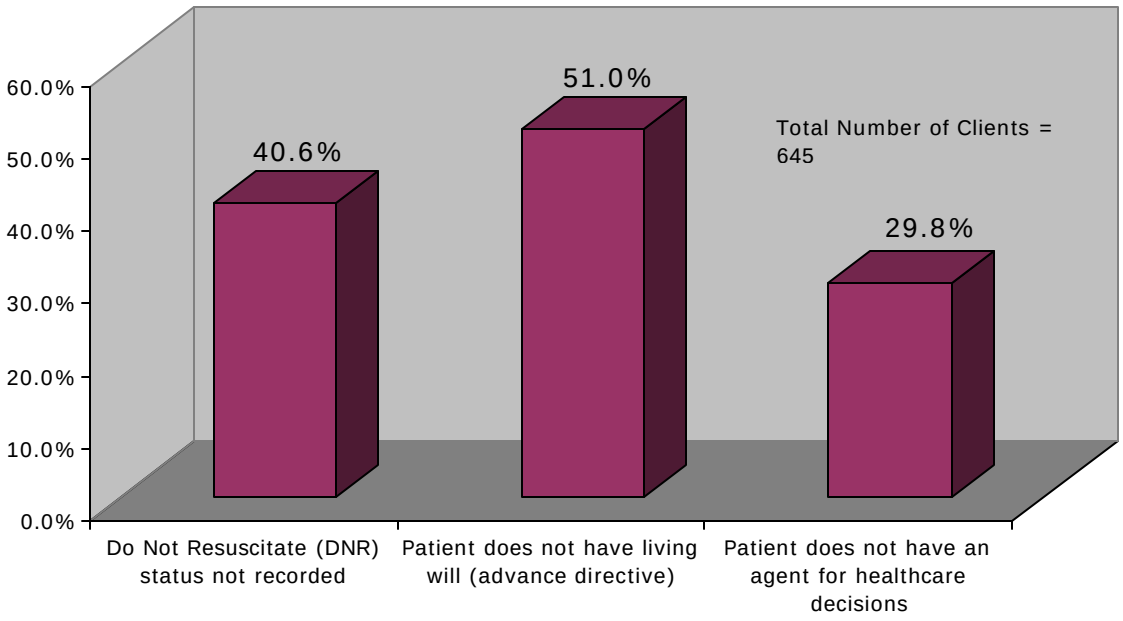
WV Senior and Disabled Persons Assessment Project Data
Medication Use



WV Senior and Disabled Persons Assessment Project Data
Percentage of Clients at Highest Risk



WV Senior and Disabled Persons Assessment Project Data
Legal Representatives



APPENDIX F

West Virginia Senior and Disabled Assessment Pilot Project
June 2001 Users' Group Meeting Issue Summary

Issue	Category	Resolution/Proposed Action
1. Alert and oriented but need question for alert but not oriented	Coupler Modification	Following discussion with Dr. Allan Tisdale, this will be included in the next release of the Coupler
2. Unable to hear but does comprehend question needs to be added	Coupler Modification	Requires second question for non-OASIS, this will be included in the next release of the Coupler
3. Need a field to add diagnosis	Coupler Modification	Following discussion with Dr. Allan Tisdale, this will be included in the next release of the Coupler
4. Would be helpful to have sterile dsq as separate finding in coupler	Coupler Modification	Following discussion with Dr. Allan Tisdale, this will be included in the next release of the Coupler
5. Would like to have physician info transferred to the PAS name, address and phone number will need additional findings added to the coupler to accommodate	Coupler Modification	Add address as a finding Add to PAS 2000 and include changes in the next release of the Coupler
6. Pain assessment, if not doing an OASIS assessment need more information, where, how much, what relieves (JCAHO requirement)	Coupler Modification	New questions have already been added to Coupler 109. No further action for the Coupler needed, but need to make sure that the agencies have loaded the correct version
7. Eyes, add macular degenerative eye disease very frequent condition, and since cataracts and glaucoma are included, this should be included	Coupler Modification	Discussed with Dr. Allan Tisdale. New finding has been added to the existing question and will be available in the next release
8. Add name of pharmacy and phone number	Coupler Modification	Discussed with Dr. Allan Tisdale. New finding has been added to the existing question and will be available in the next release
9. Wound care need a way to follow-up on wound healing	Documentation Issue	Not appropriate for SAC coupler. No further action required
10. Make annotations in bold (difficult to wade through the information and see what was input by the user)	Engine Change	Deferred
11. Needs spell checker for annotation	Engine Change	Deferred
12. Run out of room with valued findings for example with cardiac meds	Engine Change	Could add additional valued findings to address the space requirement. Engine change required. Deferred at this time
13. Want the ability to work on other areas while waiting for the PAS report to print need to look at the size of the buffer on the printer	Hardware Issue	Increasing the buffer size on a large number of printers of various brands is not feasible. We will continue to look for an alternate solution that may include changing the report format or providing an in-service to the users on how to switch applications.
14. Care mapping would be helpful	Primary Options Enhancement	Not appropriate for screening coupler. No further action required at this time

Issue	Category	Resolution/Proposed Action
15. If indicate recent surgery populates sterile dressing change on PAS 2000 – mapping schema developed in conjunction with HCA could cause problem with eligibility	Software Bug	Discussed with Dr. Allan Tisdale. New finding has been added to the existing question and will be available in the next release
16. Some information not transferring between loaded sessions - agency name contact name, and Client information, name and address	Software Bug	Unable to recreate this in testing. PKC will research further if users report that the problem continues
17. ADl Rating scale changing when bring session back up without making any changes	Software Bug	Unable to recreate this in testing. PKC will research further if users report that the problem continues
18. Select marital status in demographics not transferring to financial	Software Bug	Unable to recreate this in testing. PKC will research further if users report that the problem continues
19. Person completing assessment If select 2 findings and go back only one is selected	Software Bug	This has been corrected for the next release
20. Numerous problems with Sequence One	Software Bug	Sequence One issues have been corrected for the next release
21. Contact information reloaded takes the finding out and needs to be fixed	Software bug	Has been corrected for the next release
22. PAS 2000 frequently dropping the blood pressure	Software Bug	Continue to research
23. Dropping fax number on the PAS 2000	Software Bug	Continue to research
24. Medicare numbers, BP not printing on the PAS 2000 reports	Software Bug	Continue to research
25. On a resumption of care, if changes are made the diagnosis and severity are being left out	Software Bug	Corrections required to programming. Will be corrected in a future release
26. Allergies findings don't print on the PAS	Software Bug/ Mapping Issue	Not requested as part of the PAS report. No further PKC action required
27. Problem when printing report. Asks for it to be saved or unmodified. Have to save several times before it will allow the report to print	Software/Report Bug	Continue to research
28. The new PAS didn't overwrite the old PAS because the file name is different. Need to call all the agencies walk them through the process of tying the new PAS to the Coupler.	Support	No further problems reported since PKC coordinated training with all the agencies
29. Monthly data reports have to manually go in and label second disk	Technical Issue	PKC to investigate automating the function. Will be available in a future release
30. Some had an issue with the finding, "cooperation poor," in the General appearance question of the Body System Review sequence.	Training	No change planned
31. Medications: need to know who prepares the medications	Training Issue	New finding added to the existing question. Will be available for the next release
32. Med info needed - 5- R's, Physicians name, address and phone number	Training Issue	Reinforced training with the agencies to include this information in the valued finding

Issue	Category	Resolution/Proposed Action
33. Difficulty tracking changes between sessions need easy way to track changes	Training Issue	Will be addressed in the future with training augmentation
34. Trouble with order of questions and moving easily between sequences	Training Issue	Will be addressed in the future with training augmentation
35. Medications need date started, dose, route, frequency and whether old, changed or new	Training Issue	Reinforced training with the agencies to include this information in the valued finding
36. On bath, dressing hard to get to level 3 if can not get into bath or shower will move to level 3	WV Process	Added four new findings and new questions. Will be available in the next release
37. If have to have hands on help in the bathtub should be a level 3 (will need to coordinate with the OASIS questions)	WV Process	Added four new findings and new questions. Will be available in the next release. Further changes will require input from WVMI and BMS
38. Not seeing level 3 annotations not necessarily contributing to level of adl for example clients participation bathing and dressing grooming are two areas that need to be expanded	WV Process	Added four new findings and new questions. Will be available in the next release. Further changes will require input from WVMI and BMS
39. Possibility of adding valued finding to enter what would bump individual to next level	WV Process	No further action required following discussion with BOSS
40. Concern that leaning only to one person doing assessment, this group feels need an assessment to be done by both SWS and RN	WV Process	Tabled until decision made regarding statewide implementation and resulting policy development
41. Duplication of information on forms needs to be addressed	WV Process	Tabled until decision made regarding statewide implementation when all forms currently used will need to be evaluated.
42. For eating, bathing, dressing, and grooming ADLs, add two findings: "partial assist," total assist." These two findings would then map to level 2 and level 3 respectively. This could be done in conjunction with valued finding for documentation of bumping the level up.	WV Process	Tabled for future discussions with WVMI, BMS, BOSS
43. Temperature and respirations issue: BMS says they have to be on the PAS, WVMI says they don't	WV Process	WVMI staff indicated that Temperature and Respirations not required for the PAS 2000 Report generated by the SADPAC

APPENDIX G

WVHCA Pilot Project Costs 2000-2001

		Actual
Staff (FTE)		
Project Manager	0.8	
Administrative	0.4	
Clerical	0.3	
IT	0.1	
Legal	0.1	
Total FTEs/Salaries	1.7	$ 66,623.40
Software		
License fees		$ 25,000.00
Customization of Reports		
Boss ADL Rating Scale		$ 330.00
WV PAS 2000		$ 4,750.00
Comprehensive Integrated Assessment		$ 9,592.84
Hardware		
13 Laptops		$ 29,796.00
Orientation/Training/Meetings		
Kickoff at Coonskin Park		$ 1,545.62
Training		$ 7,529.19
Joint Application Design Session, Pipestem		$ 4,667.38
Travel		$ 6,050.14
Total		$ 155,884.57

Life Choices and WV Senior and Disabled Persons Assessment Coupler Interface Plan